537

Virginia Medical Monthly

Vol. 79, No. 10
WHOLE No. 1204

RICHMOND, VA., OCTOBER, 1952

$2.00 A YEAR
25 CENTS A COPY

GUEST EDITORIAL

Art of Medicine

IT HAS been requested that I write an editorial on the "Art of Medicine". It is doubtful that I know what the art of medicine is, but since editorials are but an expression of the thoughts of the writers, and do not claim to be possessed of authority, it is hoped that in this case, an expression of a purely personal reaction is permissible.

Along with the remarkable forward strides in scientific medicine during the past fifty years there has appeared to be a regrettable regression in the warm personal side of medical practice, and the younger generation of physicians has been subjected to some criticism: they feel and with some justification that this criticism is unjust, because in the cold statistical figures that concern percentage of correct diagnoses, cured patients, and mortality rates, they are "delivering the goods" better than has ever been done before and some have asked, "Just what did this legendary old doctor have anyway, and how does he deserve all the praise that is given him?

Before trying to answer that reasonable question, let's think a minute about what he did not have.

He had no automobile, no sulfa drug, penicillin, streptomycin, aureomycin, insulin, pituitrin, demerol, heparin, dicumerol, or novocaine; no laboratory, X-ray, metabolism, electrocardiogram, microscope, proctoscope, ophthalmoscope or sphygmomanometer; or golf clubs, or afternoons off; no modern anesthesia, injectable liver or iron, no antitoxins and no estrogenic or hormone preparations. He did not even have vitamin pills or phenobarbital. Usually he had no bookkeeper or bill collector. He had no hospital. People, then, did not go to hospitals except for operations and usually not even then. There may have been a few trained nurses but he had none. He would not have considered a telephone a bother. He would have considered it a blessing if he had had one.

In our modern conception of the armamentarium against disease, he was completely unarmed. What, then, did he have? He had morphine and its derivatives, digitalis, iodine, oral iron, strophanthus, squill, mercury in many forms, iodides, silver nitrate (and probably argyrol), belladonna, ipecac, quinine, magnesium sulphate, cascara, castor oil, arsenic, bromides, chloral hydrate, aconite, veratrum viride, chloroform, etc. But he had something more; he had tolerance, sympathy, kindness, understanding, patience, and charity. He had a mind and body dedicated to the care of the sick and a soul filled with the spirit of self sacrifice. He realized his limitations and tried to compensate for them by giving unlimited service.

But with these simple remedies and these homely virtues, he built the medical profession and brought it glory, and established our calling to a higher place in the hearts

XUM

and minds of the public than that held by any other profession; from which high point, with all our marvelous modern methods and materials, we unfortunately have somewhat receded.

He delivered babies and attended them through their childhood diseases, treated them for their adult maladies and sustained and comforted the aged. He saw his patients in their homes, ate with them if his calls happened to be around meal time and often took naps on the sofa while waiting out obstetrical cases. So he was very near to the family, particularly because his services were not limited to the medicines he gave; he was the child guidance clinic, the nearest thing to the Community Chest adviser they had, and he advised families as to the wayward and was often the Father confessor, and in a thousand ways was the family's beloved friend. He was respected as a young man, loved as he grew older, and almost revered in his declining years. He had the art of medicine.

So my untutored impression is that the Art of Medicine is an expression of the understanding sympathetic heart of the doctor. The kindly spirit of the older generation of doctors and the scientific brilliance of the younger ones are not incompatible and a mixture of equal parts of each will do much toward the restoration of our profession to that high place in the hearts of the people that it once held and where it properly belongs.

TATE MILLER, M.D.

EDITOR'S NOTE.—Dr. Miller is Professor of Clinical Medicine at Southwestern Medical School, Dallas; Ex-President of the Texas State Medical Society; and was Surgeon in the Medical Corps of the U. S. Navy, in World Wars I and II.

Floral Eponym

LONICERA

LONICER, ADAM L. (1528-1586)

Lonicer, in whose honor the honeysuckles were named by Linneus, was born in Marburg on October 10, 1528 and died in Frankfort a. M. May 29, 1586. He graduated in Medicine in 1554 and was appointed city physician to Frankfurt a. M. Among his published works are: "Methodus rei herbariae et animadversiones in Galenum et Avicennam", "Naturalis historiae opus novum plantarum, animalium et metallorum", "Hebeammenkunst nach Eucharius Rösslin", "Aphorismi Hippocratis cum commentario Foësii", and "Kräuterbuch".

The honeysuckle family comprises 150 or more species of the northern hemisphere of both the old and new world.

THE BEAM IN OUR EYE*

John T. T. Hundley, M.D.,
Lynchburg, Virginia

For over a quarter of a century I have been actively concerned with the reaction of the lay public to the medical profession, and with the type and character of services rendered by the medical profession to the public. During that period I have witnessed a definite deterioration in the friendly and trusting attitude of the public to the medical profession, and the development of an attitude of suspicion. I have investigated the factors responsible for the changed public attitudes, and have concluded that there is considerable justification.

This loss of confidence in the medical profession has occurred in spite of the fact that the last half century has witnessed medical advances without parallel in all the preceding period of recorded history. Diseases, which formerly exacted thousands of lives annually, have been eliminated or controlled. Techniques have been developed which permit the exploration and reconstruction of areas of the body hitherto unapproachable. Drugs of miraculous and predictable potency have been made available. Diagnostic procedures of acuteness and accuracy can be utilized. The halt and the lame are conspicious by their absence. The life span has been lengthened and is increasing every year. The average baby born today can be guaranteed the Biblical three score and ten years of life, practically doubling the expected span in 1900, provided he escapes the dangers of our atomic age and traffic hazards.

In the face of such tremendous progress, and in spite of the wonderful gains, which have been made, the public tends to question, looks with suspicion upon the medical profession. Generally the lay public will place its individual life in the hands of a trusted practitioner without question, but lacks confidence in the medical profession in matters affecting the life or health of the group, the body politic. There are several good and logical explanations for this seemingly incongruous state of affairs.

In the first place there is a world-wide suspicion and resentment of authority, however constituted. That is noted in the family, in religion, in the world of business, in government. Nothing is sacred. Everything is subject to question. This attitude has resulted in movements which have overthrown institutions which had seemed Gibralter-like in their strength. Social reforms have been instituted which were opposed by groups so powerful that their defeat seemed impossible. Seemingly visionary concepts have grown into the accepted law of the land. Social and political concepts have developed into world-wide conflicts that shake the very foundations of our political order. We live in a shifting world, a world in which the old order constantly changes, and our social organization is in a state of flux.

Medicine, especially organized medicine, cannot escape these influences, and it has not. In fact medicine is particularly vulnerable. It is at sometime required by everyone, but is administered by a very small group. It is needed at a time of fear, suffering, and sorrow. There is much sentimentality involved, as well as frequent financial sacrifice, so there is great emotional appeal, and the profession concerned with the provision of medical care has not escaped the world-wide resentment against authority and privilege.

Closely connected with the preceding is the widely prevalent concept of the Welfare State. No longer is the cherished tradition of "life, liberty, and the pursuit of happiness" accepted as the basic democratic ideal. In the minds of a growing number of people the idea of security has replaced the traditional ideal of opportunity. Many things, formerly thought of as desirable commodities to be purchased out of earnings and savings, are being considered as inalienable rights. Among these are food, clothing, shelter, educational opportunities, and medical care.

At this point the medical profession reaches a cross-road. Individually, and as members of a great profession devoted to service, the medical profession takes the liberal road. The attainment and the maintenance of health has always been our goal. We are constantly seeking means of preventing illness and disability, and of the rapid cure of that illness or injury which breaks through the barrier of prevention we strive to erect. We seek to provide means whereby our services will be made available to all,

*Address of the President before the annual meeting of The Medical Society of Virginia in Richmond, September 29, 1952.

XUM

regardless of ability to pay. No approach to that goal can be too radical to receive our serious consideration.

But the medical profession mortally fears the stultifying suffocation of bureaucracy. It knows well that man is capable of his best only in the free air of private enterprise. It refuses to compromise with those whose naive belief in Santa Claus leads them to advocate compulsory health insurance or any other form of governmental and bureaucratic control of the practice of medicine. The many proposals to solve the problem of medical care by revolutionary measures, have forced the medical profession into a compaign of opposition.

Because of the tremendous pressure which has been exerted to place the practice of medicine in the straight jacket of governmental control; because the problems and factors involved have not always been clear to the public, or even to a large segment of the medical profession; because the objectives have seemed so clearcut and valuable that the dangerous means have been obscured; and because the pressure of urgency has not permitted proper emphasis on the positive; it has often seemed that organized medicine has waged a purely defensive, even an obstructionist battle. That is not true. It has seemed so because the spokesman for organized medicine was reported widely when publicly he opposed some dangerous proposal, but was not quoted or was quoted inconspicuously, when he extolled the glorious accomplishments of medicine.

No profession advocates a higher ethical and professional ideal, and no profession more generally maintains its high standards, than does the medical profession. No group so resents the necessity for entering the public forum to debate the dubious or dangerous proposals put forward by starry-eyed idealists or self-seeking politicians. The medical profession would like nothing better than to devote its energies to the attainment and maintenance of a healthy people, and the constant improvement of the skills of its practitioners. But the medical profession has a public duty, and an obligation, to make its voice heard in those matters concerning which it is best informed and most qualified to speak.

Even in the midst of the battle to protect the health of the people, and the integrity of the practice of medicine, there are problems within the profession which need attention, and which must not be neglected.

The medical profession knows, and the public suspects, that all is not well. The vast majority of the practitioners of medicine live and practice the high ideals of the profession. But there are exceptions. They are few, but their misdeeds stand out like sore thumbs. As one rotten apple will spoil the barrel, so the misdeeds of one black sheep in a community will counteract the skillful, conscientious, faithful, and unselfish practice of the balance of the profession in that area.

Even in the midst of a fight for our life as a free profession, even when much of our time and energy must be devoted to combating those who would destroy our freedom and our integrity, even when we must raise funds and expend effort to inform the public of the dangers of regimentation and the value of free choice; even in the midst of the great problems we are facing, we cannot, we must not neglect the problems within the profession itself. To do so would be comparable to devoting all our professional energies to public health activities and none to the treatment of personal illness.

We expect and we deserve the confidence and support of the public. In the main we have been given both support and confidence, but to a degree less marked than in previous years. The public has questions which we do not always answer satisfactorily. They see sore spots which the medical profession makes no apparent effort to heal, and a large proportion of the responsible lay public questions the sincerity of our convictions. They ask "why should the regulation of the practice of medicine be left to the medical profession when they make no apparent effort to correct obvious abuses within the profession?" The question is well put, and the medical profession must take definite steps to render an effective answer.

What are the problems, the sore spots within the medical profession, which the public recognizes and resents, and which the medical profession takes no effective measures to correct? They may be enumerated and grouped under several headings.

1. A failure to take a personal interest in the patient and his family.

2. The development of a professional false pride.

3. A tendency to place an excessive monetary val-

uation on the services rendered by the medical profession.

4. An ofttimes selfish interpretation of the principles of medical ethics.

5. Failure to accept as a professional responsibility the acquisition, and the maintenance of the skill and scientific capabilities of our members.

6. The failure to professionally denounce and to discipline the chiselers, the black sheep, the dishonest members of our profession.

7. Lip-service, rather than clear-cut, and definite acceptance of the ideal of the medical as a service profession.

There is overlapping in this list, and books could be written in proof, or in justification of each item. I can rationalize about them, and am often tempted to justify some of these attitudes which, professionally, I know to be wrong.

1. The problem of health, and illness are matters of personal concern. The sick person cares little about rare or unusual diagnosis, or highly technical procedures utilized for the relief of suffering and disability, and in recovery. The family is likewise interested in matters of personal concern rather than technicalities. Generally the family physician recognizes and is sympathetic and cooperative toward this attitude, but the more technical specialist often fails badly. The specialist should realize that during the period of his attention he not only owes the maximum of professional and scientific skill to the patient, but a personal interest in the patient as an individual and a member of a complicated society. As I have dealt with the problems of public medicine, I am increasingly convinced that the most frequent failures of the members of the medical profession are in the realm of personal rather than professional dereliction.

2. The problem of professional false pride is a peculiar one. I speak of the doctor who resents the necessity of explaining in simple terms, apparently feeling that the use of technical jargon creates respect and confidence, who is aggravated by a request for information from a member of the family, the employer, or the insurance company, who considers it beneath his dignity to examine school children or make a talk to the Parent-Teacher Association. In this group may be included the members of the profession who participate in no community activities, but when approached for assistance emphasize the tremendous amount of charity work they do as an excuse to free them from all uncongenial demands or duties. This group fails to vote, "politics are dirty," and they can't soil their professional hands. But they are loudly vocal concerning anything which receives their disapproval. They cannot be persuaded to participate in any of the Public Relations activities of their societies. We all know the type. Some are very competent professionally, but they are often intellectually unbalanced and emotionally immature.

3. There is tremendous emotional impact to illness. Anxiety and fright combine to produce a willingness to try any measures, regardless of expense. But with recovery, and a more calm appraisal, after the emergency is past, the attitude toward costs undergoes a change. A new treatment, offering results not obtainable with old methods, a recently developed technique, or a new drug will be accepted, however costly. Too frequently has the medical profession been guilty of charging disproportionately for new or novel measures. Too often have doctors based their fees on "what the traffic will bear", rather than on honest appraisal based on services and need. The practice of medicine should not produce wealth. The conscientious disciple of Hippocrates should expect a reasonable competence which provides adequately for him and his family, allows opportunity for self-improvement and relaxation, and security against the hazards of disability or age, but does not produce wealth.

4. The principles of medical ethics as embodied in the traditional Hippocratic oath, and as altered to fit modern conditions, are designed primarily to prevent harm to the patient through incompetence, dishonesty, or lack of cooperation on the part of the doctor. On the contrary members of the medical profession frequently assume that the principles of medical ethics are designed for the protection of one doctor against the encroachments of another. Our concept of professional ethics should be broadened. We should concern ourselves over the general practitioner who persists in treating a condition for which he lacks training and experience. It should cover the specialist who exceeds his own field and cares for problems out of his domain, or retains a patient referred to him for a particular purpose. It

XUM

should regulate and discipline the doctor who knowingly exceeds his professional capacity to hold a profitable insurance case or contract. It should concern itself with the excessive, exorbitant fee for medical services. It should make it incumbent upon a doctor to refer patients where they may best be served, rather than the basis of friendship or reciprocated favors.

5. Following medical school and hospital training, the medical graduate takes the examination for license to practice. The examining board grants him a license which permits him to practice "medicine and surgery in all its branches," or similar terminology. From that time on the doctor is required only to maintain a standard of practice comparable to that practiced in his community, and to avoid gross infraction of law or local ordinance. He may never read a book or magazine, attend a post-graduate clinic or conference, or participate in medical society activities. He may forget everything he has learned and acquire nothing to replace it. His incapacity and deterioration is subject only to lay, not professional standards, and the burden of proof of competence is on the plaintiff not the defendant. That situation is wrong. The medical profession, acting through its official organizations should take the initiative in instituting some reasonable measure of control over the capacity of its members to continue to practice the profession so many are seriously neglecting. Few, if any, conscientious doctors would seriously object to taking a re-examination at certain stated intervals, on matters of current medical interest and progress, to demonstrate their capacity to accept the responsibility for the care of the lay public, which is incapable of judging for itself. Failure to provide for standards to continue in practice, comparable to the standards required to initiate a practice, is indefensible, and by our silence we are encouraging the incapable doctor to continue to dupe the unsuspecting and gullible public.

6. Our standards are of the highest. Our ethics are clear cut. We have committees on Ethics, on Censorship, on Grievance. We boast of our accomplishments and the high level of our ideals, but we too often fail to carry them out. We accept credit for the high level of idealism and service, but we refuse responsibility for the sewers, and we have both. The public judges the medical profession by the jack-leg, the chiseller, the exorbitant charger, the shady-practitioner, as well as by the noble, conscientious, idealistic leader of the profession. If we claim credit for the shining light, we must accept blame, and take responsibility for the canker within our professional body. We have confused freedom of choice, individual initiative, professional liberty, with license. Liberty and freedom are not gifts, nor are they rights to be expected without conscious effort. They are privileges to be earned, and must be paid for by acceptance of obligation. That obligation is to clean our ranks of those who refuse to abide by the high standards we claim. The Principles of Medical Ethics of the American Medical Association state specifically that "a physician should expose, without fear or favor, incompetent or corrupt, dishonest or unethical conduct on the part of members of the profession". Until the right thinking, honest, fair-minded members of the profession are willing to subscribe whole-heartedly to that standard, we will never rid our profession of those unworthy representatives we are encouraging by our acquiescent silence.

7. The medical, by the very nature of its activities, is a service profession. As a service profession it is dedicated to the prevention and relief of illness, suffering, and physical and mental handicaps. Those services are available to all who need them without regard to race, color, creed, or financial status. The practice of medicine is also an occupation, a vocation, a means of livelihood. There is frequently difficulty in reconciling those two viewpoints. Keeping the ideal of service paramount in a world of mounting costs, and uncollectible bills is at least trying. Dean Pound expressed the thought well when he defined a profession as "an organized calling in which men pursued a learned art and are united in the pursuit of it as a public service—no less a public service because they make a livelihood thereby".

I fear that the ranks of medical students, and of the practicing profession, have received an undue proportion of those who have chosen the career of medicine primarily as a reasonably assured means of attaining an acceptable social and community status and financial competence. That group has never conceived of medicine as a service profession. They are more often specialists, for they see the higher income, the more leisurely life, the greater respect, the office and hospital practice of the specialist, and they contrast that life with the more difficult

and less remunerative life of the rural practitioner or family physician.

Do not get the idea that I am condemning specialization, or that I am placing sole blame on the specialist. I am not, for there are general practitioners whose ideal and God is money. But I fear that specialization, as both cause and effect, has produced a dis-proportionate number of those who have at best a poor concept of medicine as a profession of service to humanity.

We are members of a noble profession. There is no higher. Our ideals are exalted. Our ethical standards are above reproach. We deservedly are entrusted with the most intimate secrets of our patients. We are given confidence in matters of life and death. Generally we deserve that confidence, and that trust.

But confidence and trust impose tremendous responsibilities on the medical profession. The responsibilities and obligations which are entrusted to us, and which we assume, are unique. We deal in a commodity which the lay public cannot evaluate. The body of knowledge encompassing the practice of medicine has grown far beyond the capacity of any one man to assimilate or to utilize. It is that tremendous growth in medical knowledge which has made specialization necessary. If no one man medically trained, can judge with authority all the various fields of medical practice, it becomes preposterous to assume that the lay public can evaluate any aspect of the practice of medicine.

That means that the medical profession, and organized medicine in particular, must assume two responsibilities. First, the individual practitioner must be constantly alert, and everlastingly conscientious, to assure that his patients are receiving from him good, efficient, scientific, sympathetic and ethical care. And second, that the medical profession provides a guarantee to the lay public that those members of our profession protected by the cloak of membership in medical organizations, be likewise efficient, capable, honest and ethical. It takes courage to discipline or to expel an incompetent or dishonest member of our profession, but the public has a right to expect of us that sort of courage, and we of the medical profession have no right to expect the confidence and trust of the public unless we are willing to face courageously that challenge.

Ours is a great profession, which demands of each of us great accomplishments. Not the least of those demands is self-criticism, honest evaluation, and the courage to purge our profession of our faults and our weaknesses.

As we clean our own house, as we correct our faults, we will regain, and we will deserve the confidence, the respect, and the loyalty that has been considerably lost in recent decades.

SAMA Honorary Memberships Open to Physicians.

"Keep up with the young men who are keeping up with you" is the theme of a fall campaign now under way by the Student American Medical Association to encourage physicians to join the organization as honorary members. This new membership category was created at the request of doctors who wish to keep in touch with the student side of medical education, reports David Buchanan, national president.

Honorary membership, with yearly dues of five dollars, entitles the physician to a subscription to the monthly 72-page Journal of the SAMA as well as participation in the annual convention and other activities of the association. Physicians and friends of the medical student interested in becoming honorary members should contact Mr. David Buchanan, Student American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois.

XUM

BILATERAL POLYCYSTIC OVARIES ASSOCIATED WITH STERILITY, AMENORRHEA AND HIRSUTISM*

MASON C. ANDREWS, M.D.,
Norfolk, Virginia.

The subject of polycystic ovaries associated with a clinical syndrome is potentially confusing, for we are suddenly asked to believe that a condition which is not mentioned in most standard texts and which until recently has not been recognized in most major clinics not only exists but occurs commonly enough for individual investigators in various parts of the world to accumulate sizeable personal series. I will attempt to present the evidence which has apparently recently convinced many prominent gynecologists that the condition is valid.

The clinical syndrome of amenorrhea, sterility and hirsutism associated with the pathological findings of bilaterally enlarged polycystic ovaries of a type to be described later was first reported by Stein and Leventhal[1] in 1935 from the Michael Reese Hospital with a description of seven cases.

As originally described, the syndrome consisted of sterility and amenorrhea. Later it was extended to include certain cases of menstrual irregularity which was thought to be an early stage of the process. Hirsutism was observed in 50% of the patients. There was clinical as well as pathological evidence of ovulation failure. Pathologically, the ovaries showed bilateral enlargement to 2 to 5 times normal size

TABLE I
REPORTED CASES OF STEIN-LEVENTHAL SYNDROME

Author	Number Cases	How Treated	Menstrual Outcome				Pregnancy	
			Improved			Failure	Number	% of Sterile Patients
			%	Regular	Irregular			
Stein 1949	75 (28 single)	Wedge Resection	89%	67	—	8	26	65%
Allen 1945	7	Wedge Resection (cul-de-sac)	——	—	—	—	5	71%
Bailey 1937	17 (11 single)	Wedge Resection plus Back to Back	75%	13	—	4	1	17%
Ingersoll & McDermott 1950	2	Biopsy of Ovary	——	—	—	2	—	——
	13	Wedge Resection	——	13	5	1	—	——
	6	Split and Back to Back						
Meaker 1950	65 (20 sterility only)	Wedge Resection	78%	27	6	9	35	70%
Seigler 1950	26	Wedge Resection	——	14 (8 not followed)	—	—	18	69%
Leventhal & Cohen 1951	10	Wedge Resection	——	10	—	—	4	80%

*Read before the annual meeting of The Medical Society of Virginia at Virginia Beach, October 7-10, 1951.

From the Department of Pathology and the Department of Obstetrics and Gynecology, De Paul Hospital, Norfolk, Va.

and were covered by a thick tunica which looked like the skin of an apple on cut section and beneath which were compressed many follicle cysts. The surface was quite smooth and pale. Subsequent authors emphasized the compression of the ovarian stroma due to entrapment of the cysts under the tight surface[5]. More recently, Leventhal[8] has emphasized the hyperplasia of the theca interna of the multiple follicles and the frequent luteinization therein.

Stein and Leventhal[1] postulated originally that the difficulty was mechanical in that the thick tunica blocked ovulation. They felt that by removing a wide wedge of this surface the ovulation could be accomplished. Wedge resection of both ovaries yielded good results in restoring menstrual function in the first seven cases and two pregnancies resulted.

By 1949 Stein[3] had extended his series to 75 cases. It will be noted that 28 single girls appear in this group and therefore that sterility was not a factor. They were included because in the opinion of the author the condition was progressive and threatened their future welfare. All cases, of course, had bilateral polycystic ovaries of the type described above. 89% showed improved menstrual function with most completely cured. 26 of the sterile patients became pregnant. In no case did polycystic ovaries recur over prolonged observation. There were three patients who developed inflammatory adhesions and simple unilateral cysts which required operation. Two were corpus luteum cysts. The patients with hirsutism (50%) showed slight regression following operation but the progression was terminated.

TABLE II
Stein-Leventhal Syndrome

Clinical	*Pathological*
Sterility	Ovaries Englarged Bilaterally 2 to 5 x
Menstrual Irregularity (Amenorrhea principally)	Pale, Smooth, Thick Covering Retaining Multiple Cysts
Hirsutism (50%)	Stroma Dense and Compressed. Hyperplasia of
Ovulation Failure	Theca Interna with Frequent Luteinization

One is rightly suspicious of a condition seen by one person so frequently and not by the vast bulk of practicing physicians. There are other witnesses. In discussing Stein's paper in 1945, Edward Allen reported 7 cases. These were treated by wedge resection through the cul-de-sac. His results were good in obtaining pregnancies for sterile women. In 1937, Bailey[4] reported 17 cases from Manchester, England. He, also, postulated entrapment of the follicles and went one step farther to try to obviate the condition. After splitting the ovary and resecting a wedge, he sewed the ovaries back to back. His restoration of menstrual function was good but pregnancy rate low, probably because of extensive adhesion to the exposed raw ovary.

In 1950 a report came from the Massachusetts General Hospital by Ingersoll and McDermott[5]. They found in the pathological and surgical files 21 typical cases over a 12 year period. They had been treated in various ways. Two cases had undergone exploratory laparotomy for investigation of hirsutism. The ovaries were biopsied and the adrenals palpated. The biopsies were found on review to show the typical changes described above. There was no relief of the amenorrhea, presumably because an inadequate amount of ovary was removed. 13 cases were treated by wedge resection and 6 by splitting with some resection and sewing back to back. 18 showed some improvement. There was no information about pregnancy outcome.

Meaker[7] reported 65 cases allegedly of the same condition. He stretched the clinical requirements to include 20 cases who complained of sterility only. All cases, of course, had the characteristic ovaries. It must be admitted that relief of sterility in 14 of those 20 patients is suggestive that some good was accomplished. 35, or 70%, of the sterile patients in the entire series became pregnant. His relief of menstrual abnormalities was comparable to other reports.

During the discussion of this report, Seigler[10] reported 26 cases with 69% pregnancies. Menstrual outcome in all cases followed was improved.

In 1951, Leventhal and Cohen[8] reported 10 cases collected from the Michael Reese Hospital between 1945 and 1949. All showed restoration of regular menstrual function. 4 of 5 sterile patients conceived.

CASE REPORT

A case recently treated here exemplifies well this condition. The 23-year-old patient in question I first saw in 1950 complaining of sterility of 4½ years' duration and increasingly long periods of amenorrhea. On questioning, she reported that the increasingly heavy hair on her lip, chin, arms and legs was a

XUM

cause of concern. Office records show she first sought relief of sterility 3 years ago, in 1948, after 1½ years of marriage. Her periods had begun normally at 12 and been regular until marriage at 18, after which periods became farther and farther apart and scantier.

Pelvic examination then, in 1948, was recorded as normal. Insufflation subsequently showed the tubes normally patent; Huhner's test showed sufficiently rugged sperm. BMR was normal. Endometrial biopsy on the 27th day of a cycle showed nonsecretory endometrium and therefore no ovulation. She then underwent several series of hormone injections apparently intended to produce ovulation. A preparation known as synapoidin was used and, of course, failed. This was followed on two occasions by transcervical insemination.

In September of 1949, after skipping a period, she bled too heavily and a curettement was done. The endometrium was non-secretory and atrophic. Six months later she was told somewhere she had a cyst of the right ovary but declined the offer to have the organ extirpated.

On physical examination in June of 1950, she appeared to have a stocky, square, masculine habitus with the moderate increase of dark hair described above. The clitoris was not enlarged. The pubic hair was masculine in distribution. The uterus was normal size. The right ovary was twice normal size and free. The left ovary was 1½ times normal size. Endometrial biopsy the following month, after three months of amenorrhea, showed again early proliferative endometrium. During five months of observation, she had one small period four months from her previous one. Both ovaries remained 1½ to 2 times normal size. Glucose tolerance test was normal. BP was normal. 17-ketosteroid excretion was 21 gmg./24 hrs. Fasting eosinophile count was 38/cu. mm. and 4 hours after ACTH the count was 12/cu. mm. The figures correspond with low normal for this laboratory.

X-ray of the spine showed moderate decalcification with definite fishboning of the upper thoracic vertebra. Ca., Phos., total protein and A/G ratio were normal. The sella turcica was normal.

In November of 1950, laparotomy was undertaken with a provisional diagnosis of Stein syndrome. The ovaries were found to be twice normal size, smooth, pale and characteristically polycystic. A wedge of each ovary was resected. The adrenals were palpated and no enlargement detected. Microscopically, the characteristic changes described above were found.

Following operation, the patient menstruated regularly every 32 days. She conceived during the third cycle following operation. Pregnancy progressed normally until the 24th week when she suddenly miscarried a normal 450 gm. fetus.

Following this she has had normal periods, properly timed, and temperature charts indicate ovulation. At last report she was progressing normally in the 31st week of a second pregnancy. She conceived during the second month of exposure.

The 17-ketosteroid excretion had returned to normal in May, 1951, being 8.8 mgm./24 hrs. The X-rays of the spine show no change since operation. The hirsutism is improved definitely.

DISCUSSION

Other information which confirms and supplements the original observation about the clinical picture of this condition is available from the combined series reported above. The usual age distribution is from 18 to 28 and the typical case has a normal onset of menstruation with irregularities, often with excessive bleeding, developing in the teens, followed by periods of amenorrhea of increasing duration. The BMR is usually normal. Glucose tolerance curves and X-rays of the sella are normal.

17-ketosteroids were normal in 9 cases determined at the Massachusetts General Hospital. However, George Smith[6], writing in a recent endocrinology book, states that the 17-ketosteroids may be normal or elevated in this condition. The case just cited would seem to bear this out. Leventhal[8] found pregnandiol excretion, elevated in two cases, returning to normal after wedge resection of ovaries. In two other cases pregnandiol excretion was normal.

The endometrium obtained on three occasions in the case just mentioned shows the typical early proliferative endometrium resulting from absence of ovulation, and suggests low circulating estrogen. The absence of breast development and secondary sex characteristics in cases whose symptoms date from puberty also suggests low estrogen. The osteoporosis in our case may be due to this. Rarely, the reported cases have shown secretory endometrium or histological evidence of a corpus luteum, but this is very

uncommon. The usual absence of any secretory changes would suggest progesterone deficiency. However, the finding of elevated pregnandiol in 2 of Leventhal's cases points to the possibility of progesterone production in some cases at least. These two cases were the most marked hirsutes. Progesterone in large amounts is known to be androgenic. The usual lack of secretory changes in the endometrium could conceivably be due to the lack of alternation of estrogen and progesterone.

Pending further controlled investigation of steroid excretion in cases of the Stein syndrome, any explanation of it must be a guess. At present, it would seem that in some way the pituitary initiates an abnormal ovarian function. In a study of 40 women who had suffered prolonged intracranial pressure, Kraus and Spivak found hyperplasia of the anterior pituitary consistently and bilateral polycystic ovaries in 82%. Reynolds[11] produced cysts in the ovaries of rabbits by administration of gonadotropins. However, the F.S.H. has been reported normal in the 12 cases so far reported where this determination has been done.

It would seem most reasonable to suppose that the malfunctioning ovaries in this condition produce a variety of closely related steroid hormones sometimes detectable as 17-ketosteroids, sometimes as pregnandiol, sometimes producing hirsutism. The hyperplastic, frequently lutenized, cells of the theca interna would seem the most likely site of production. Whether the thick tunica plays a mechanical role in the malfunction cannot be said. All this is sheer speculation. The most accurate estimate seems to be that it makes little sense but it works.

Among 81 pregnancies following wedge resection in sterile patients reported by Stein and by Seigler, the abortion rate was higher than average. 17½% of Stein's and 17% of Seigler's[7] patients aborted, compared to the general expectancy of 10%.

DIAGNOSIS

The diagnosis is aided by the clinical history including positive proof of repeated ovulation failure by endometrial biopsy and temperature charts. But it is absolutely essential to prove the presence of bilaterally enlarged ovaries. This may often be done by palpation alone, but Stein reports that in almost one-half of his cases this was not possible and he used an ingenious technique he calls pneumogynecography. The technique consists of introducing 1000 c.c. of CO_2 into the peritoneum by transuterine insufflation or abdominal puncture and taking X-ray in modified knee-chest position. The Boston investigators rely on the culdo-scope for direct visualization of the ovaries. The condition is too rare to make laparotomy to look at the ovaries good practice when their size cannot be determined.

TREATMENT

The most successful method of treatment has been the wedge resection of one-half to two-thirds of both ovaries. Cysts remaining probably should be punctured from the inside of the ovary. If rubber-shod clamps are used, the ovarian vessels should not be constricted more than twenty minutes.

A word of caution must be appended to this discussion. Follicle cysts *per se* have little or no clinical significance. It seems probable that more harm is still being done by cutting into ovaries containing them than will be outweighed by the good done patients with the Stein syndrome. If the spreading knowledge of this condition leads to an increase in unwarranted ovarian surgery, it is best unheard of.

CONCLUSIONS

1. A clinical and pathological entity involving bilateral polycystic ovaries with a thickened tunica albuginia exists.
2. It is correctable in a large number of cases by wedge resection of both ovaries.
3. A case exemplifying this condition has been presented. The association of osteoporosis has been reported for the first time. Elevated 17-ketosteroid excretion returned to normal following surgery.
4. The rarity of this condition makes essential exact diagnosis to prevent unnecessary unprofitable and harmful operations.

REFERENCES

1. Stein, I. F., and Leventhal, M. L.: Am. J. Obst. and Gyn. **29**:181, 1935.
2. Stein, I. F.: Am. J. Obst. and Gyn. **50**:385, 1945.
3. Stein, I. F., Cohen, M. R., and Elson, R.: Am. J. Obst. and Gyn. **58**:267, 1949.
4. Bailey, K. V.: J. Obst. and Gyn. Brit. Emp. **44**:637, 1937.
5. Ingersoll, F. M., and McDermott, W. V.: Am. J. Obst. and Gyn. **60**:117, 1950.

XUM

6. Smith, G. VanS.: Textbook of Endocrinology; W. B. Saunders, Philadelphia, 1950.
7. Meaker, Samuel R.: Fertility and Sterility. 1:293, 1950.
8. Leventhal, M. L., and Cohen, M. R.: Am. J. Obst. and Gyn. 61:1034, 1951.
9. Allen, Edward; discussion Stein, I. F.: Am. J. Obst. and Gyn. 50:385, 1945.
10. Seigler, S. L.; discussion Meaker, S. R.: Fertility and Sterility. 1:293, 1950.
11. Reynolds, S. R. M.; quoted by Stein, I. F., in discussion: Meaker, S. R.: Fertility and Sterility. 1:293, 1950.

605 Medical Arts Building.

New Drug for Treatment of Certain Types of Epilepsy.

A new anticonvulsant drug—hibicon (trade mark)—has proved effective in the treatment of grand mal and psychomotor epilepsy, it was reported in the Archives of Neurology and Psychiatry, published by the American Medical Association.

A compound differing in chemical nature from other modern anti-convulsant drugs, hibicon has been found singularly free from toxic reactions and from untoward side-effects, according to Dr. C. D. Hawkes, of the department of neurology, University of Tennessee College of Medicine, Memphis.

He based his conclusions on a two-year study of 59 patients suffering from chronic epilepsy who were given the new drug. Convulsant seizures of 39 of the patients were adequately controlled by the drug, which was employed alone in all but 11 cases; in the 11 patients, supplementary barbiturates were used.

"In 23 of the 39 patients whose seizures were satisfactorily controlled by hibicon, the results were rated as excellent," Dr. Hawkes pointed out. "These patients were seizure-free or had only rare attacks. In 16 patients, the control was rated as good; these patients had one to four attacks a month, but were nevertheless greatly benefited.

"In the remaining 20 patients placed upon hibicon therapy during the two-year trial period, the compound failed to hold the attacks below one a week, and the result was classified as poor. It is only fair to state that in eight of these patients the seizures have never been adequately controlled by any anticonvulsant drug or combination of drugs.

"The employment of hibicon appears to widen the scope of the pharmacological therapy of chronic epilepsy, since it has successfully controlled the seizures in some patients whose attacks have failed to respond to all other present-day anticonvulsant drugs."

According to Dr. Hawkes, hibicon also was found to be beneficial in the treatment of mixed forms of epilepsy upon the addition of small amounts of barbiturates, and has been proved effective in the treatment of idiopathic and symptomatic epilepsy. Petit mal epilepsy, he added, is not benefited by the drug.

Hibicon is a white crystalline solid which has a low solubility in water, but is readily absorbed after oral administration. It has a wide safety margin, and side-reactions are uncommon and usually minor. The effective range of the adult dose appears to be from one to two grams three or four times a day. In small children, a dosage of one-fourth to one-half gram three or four times a day has been found satisfactory.

THE SUCCESSFUL TREATMENT OF TWO CASES OF GOLD DERMATITIS WITH ADRENOCORTICOTROPHIC HORMONE (ACTH) AND CORTISONE

Richard N. Baylor, M.D.,
and
Elam C. Toone, Jr., M.D.,
Associate Professor of Medicine, Medical College of Virginia,
Richmond, Virginia

The value of British anti-lewisite (BAL) in the treatment of some cases of gold dermatitis has been recognized by many observers during the past several years. Favorable results were not always obtained, however. Cohen and others[1] reported 3 cases of gold dermatitis treated successfully with BAL. Davison[2] successfully treated 3 early cases. In England, Simpson[3] treated 2 cases, 1 of nine months' duration, and obtained dramatic results. Margolis and Caplan[4] noted only moderate improvement in 2 cases of long-standing generalized exfoliative dermatitis resulting from aurothioglycolanilid (lauron). In another case of mild dermatitis resulting from lauron, no appreciable benefit was obtained. Macleod[5] reported 11 cases of gold dermatitis treated with BAL and concluded that the drug probably influenced the course favorably.

From these reports, one gathers that BAL is a potent agent in combating gold dermatitis, but results have not always been satisfactory.

Recently Steinberg and Roodenburg[6] reported a case of gold dermatitis treated successfully with adrenocorticotrophic hormone (ACTH). Otherwise, there has been little reference in recent literature in the treatment of gold dermatitis with either ACTH or cortison.

The purpose of this paper is to report 2 cases of gold dermatitis, one of whom improved on ACTH and the other on alternating courses of cortisone and ACTH. BAL was employed in both cases and in each was a therapeutic failure.

From the Department of Medicine, Medical College of Virginia, and the Medical Service, McGuire Veterans Administration Hospital, Richmond, Virginia.
Published with the permission of the Chief Medical Director, Department of Medicine and Surgery, Veterans Administration, who assumes no responsibility for the opinions expressed or the conclusions drawn by the authors.

Case Reports

Case 1: Mr. G. N., a 54 year old white male, was admitted to the Arthritic Section of the Medical Service, McGuire Veterans Administration Hospital, on September 5, 1950, with the chief complaint of generalized rheumatoid arthritis of 20 years' duration and with an exacerbation during the past 9 months. There had been intermittent, severe attacks of heat, redness, tenderness, and swelling of the peripheral joints occurring several times a year. For several years there had been redness, scaling, and itching of the lower legs and about the fingers. A diagnosis of psoriasis had been made by the family physician.

The temperature, pulse rate, and blood pressure were normal. The right wrist was enlarged, tender, and limited in motion both for flexion and extension. Pain on full flexion and extension of the left wrist and a slight flexion deformity of both elbows were present. There was a moderate restriction of motion of both shoulders, particularly for abduction and external rotation. The skin over the anterior surface of both legs showed numerous red, scaling areas of dermatitis which were considered to be psoriasis.

Laboratory data: hemoglobin 13.4 gm., leukocytes 7,000, 60% polymorphoneutrophils, 31% lymphocytes, 4% monocytes, 1% eosinophils. The urinalysis was normal. Cardiolipin negative. The E.S.R. was 14 mm. in 1 hour (Cutler method).

The admission diagnosis was that of psoriatic rheumatoid arthritis, early, moderately active (stage 1, class 3).

On September 15, 1950, treatment with intramuscular injections of aurothiomalate (myochrysine) was started. By November 3, 1950, a total dose of 250 mg. of the gold salts had been administered.

At this time, a maculopapular, erythematous rash was first noted on the neck, face, and wrists. It was first thought that this might be a contact dermatitis

and the lesions were treated with soothing preparations, and injections of gold were discontinued. Gradually the dermatitis spread to involve almost the entire body, being more marked in the flexor creases (Fig. 1). A skin biopsy showed an exfoliative type of dermatitis.

ment in the dermatitis. After 7 days the dose was again decreased to 75 mg. daily, and then to 50 mg. During this time, the dermatitis showed a gradual relapse and on January 18, 1951, because of an absolute eosinophil count of 784 cells per cmm., it was decided to change the treatment to

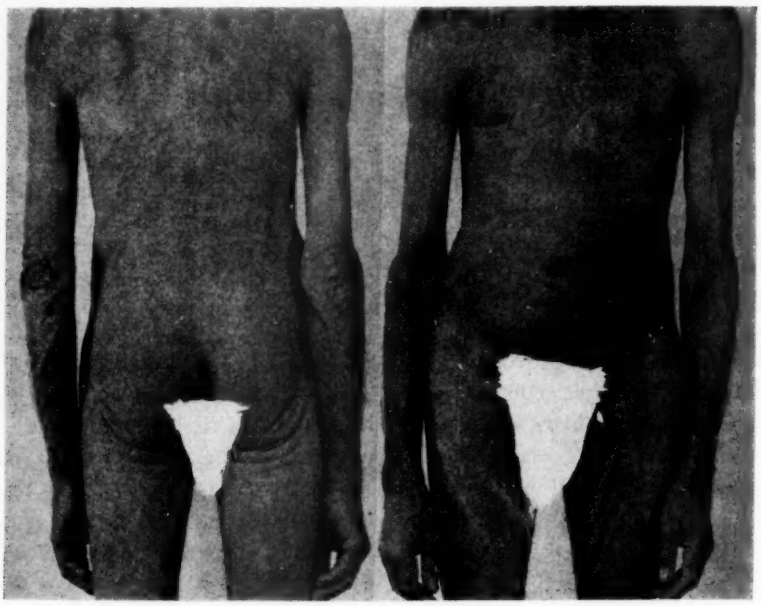


Figure 1.
Case 1, January 20, 1951. Severe generalized exfoliative dermatitis.

On December 2, 1950, treatment with BAL was started on a dose schedule of 150 mg. intramuscularly every 4 hours for 2 days, and then 150 mg. twice a day for 10 days. The skin lesion failed to improve.

In view of the steady progression of the dermatitis, it was decided to start treatment with cortisone (Chart 1). On December 13, 1950, 300 mg. of this drug was given in a dose schedule of 100 mg. every 8 hours, and the following 2 days he received 100 mg. every 12 hours. Thereafter 100 mg. was given intramuscularly each day. Within 48 hours improvement was noted with regression and clearing of the dermatitis, and improvement in strength and appetite. However, the skin lesion did not disappear completely and on December 27, 1950, when the dose of cortisone was reduced to 75 mg. daily, there was prompt exacerbation of the dermatitis. The dose was then increased to 100 mg. daily on December 30, 1950, with slow but definite improve-

ACTH.

ACTH was started on January 20, 1951, in a dose schedule of 10 mg. every 6 hours. No significant improvement was noted after 2 days and the dose was then increased to 25 mg. every 6 hours. No improvement was noted on this schedule and on February 5, 1951, ACTH was discontinued and cortisone was started again.

On this date, 300 mg. of cortisone was given in a dose schedule of 100 mg. every 8 hours and on the next 2 days he received 200 mg. in a dose schedule of 100 mg. every 12 hours. Thereafter the dose schedule was maintained at 100 mg. daily. At this time, in order to determine the excretion rate of gold, BAL was given over a 3 day period. A 24 hour specimen at the end of this time was negative for detectable gold.

Cortisone was discontinued on February 19, 1951, because of the slow response, and ACTH was again given over a 3 day period for a total dosage of 250

mg. On March 3, 1951, it was noted that the skin had become considerably worse with increased scaling, several areas showing a tendency to weep. Cortisone was resumed on March 5, 1951, in a dose schedule of 100 mg. daily with some slight improvement of the skin within 24 hours. Following this, however, the condition remained stable and no improvement was noted. Cortisone was discontinued on March 16, 1951, and ACTH started again on a dose schedule of 25 mg. four times a day for 2 days, then 25 mg. twice a day, and finally 25 mg. each day. Between March 16, 1951, and March 28, 1951, a total dose of 700 mg. was given with marked improvement in the exfoliative dermatitis, and the drug was discontinued (Chart 1).

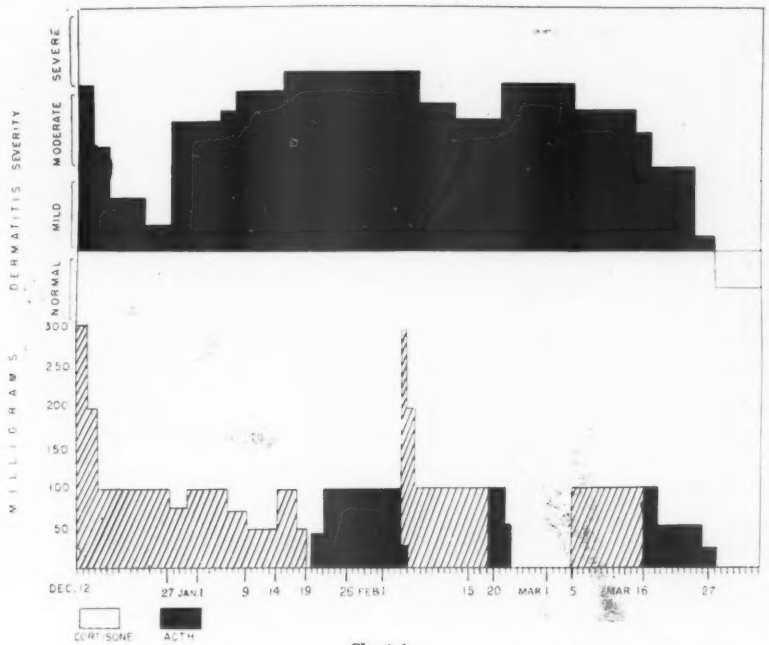


Chart 1.
Case 1 illustrating response of skin to treatment with ACTH and cortisone.

Following this there was no relapse and the patient was discharged from the hospital June 14, 1951, with no evidence of any skin lesion. When last examined, August 20, 1951, the skin was normal (Fig. 2).

Case 2: Mr. P. N., a 53 year old white male, was admitted to the Arthritic Section of the Medical Service, McGuire Veterans Administration Hospital, on May 16, 1951, with rheumatoid arthritis of 11 years' duration. The wrists, metacarpophalangeal joints, proximal interphalangeal joints, knees, ankles, and feet were involved. For several months there had been a marked exacerbation of the arthritis. For 17 weeks cortisone had been given in a daily dose averaging from 150 to 250 mg.

On admission to the hospital, the physical illness was complicated by a depressed mental state which was thought to be a complication of cortisone administration, since it had developed during therapy. The blood pressure was 140/80, the pulse rate 110 per minute, and the temperature 100 degrees Fahrenheit. There was swelling with increased heat, tenderness, and limitation of motion of the wrists, metacarpophalangeal, and proximal interphalangeal joints. The knees were markedly swollen with increased heat, tenderness, and a moderate limitation of flexion and some limitation of extension. The left ankle was swollen, tender, and red. Good motion was present in the hip joints. A mild, pitting edema was present over the left ankle and dorsal surface of the left foot.

Laboratory data: hemoglobin 12.1 gm., leukocytes 14,400, 67% polymorphoneutrophils, 24% lymphocytes, 8% monocytes, and 1% eosinophils. The E.S.R. was 36 mm. in 1 hour (Cutler method).

XUM

The serum sodium was 142 mEq./1, and serum potassium 5.7 mEq./1. The electrocardiogram revealed a sinus tachycardia.

The admission diagnosis was rheumatoid arthritis (stage 3, class 4).

Cortisone was discontinued because of possible adrenal suppression and treatment with ACTH was started on May 17, 1951, on a dose schedule of 25 mg. every 6 hours. This controlled the joint pain, tachycardia, and temperature elevation.

It was then decided to employ one of the gold salts and gradually decrease the dosage of ACTH until it could be discontinued. Ten mg. of aurothiomalate (myochrysine) was given on May 24, 1951, and a second dose of 10 mg. on June 1, 1951. On May 24, 1951, the ACTH was decreased to 15 mg. every 6 hours. This resulted in a prompt relapse of his arthritis with severe joint pain, temperature elevation to 102 degrees Fahrenheit, sinus tachycardia of 110, and a leukocytosis of 16,000.

On June 5, 1951, it was first noticed that the patient was developing a papular erythematous rash of the chest, groin, feet, and legs. The ACTH was discontinued on this date and no further gold was given. The rash was thought to be a manifestation of gold toxicity and BAL was started on June 7, 1951, in a dose schedule of 150 mg. every 4 hours for 4 doses, and then 150 mg. daily. The rash continued to increase in severity and spread to involve the entire body. Because of this progression in the face of therapy, BAL was discontinued and ACTH was restarted on June 9, 1951, in a dose schedule of 25 mg. every 6 hours. The rash began to improve within 18 hours and had completely disappeared within 3 days except for a few areas of scaling which disappeared within 1 week. The patient's skin has since remained normal.

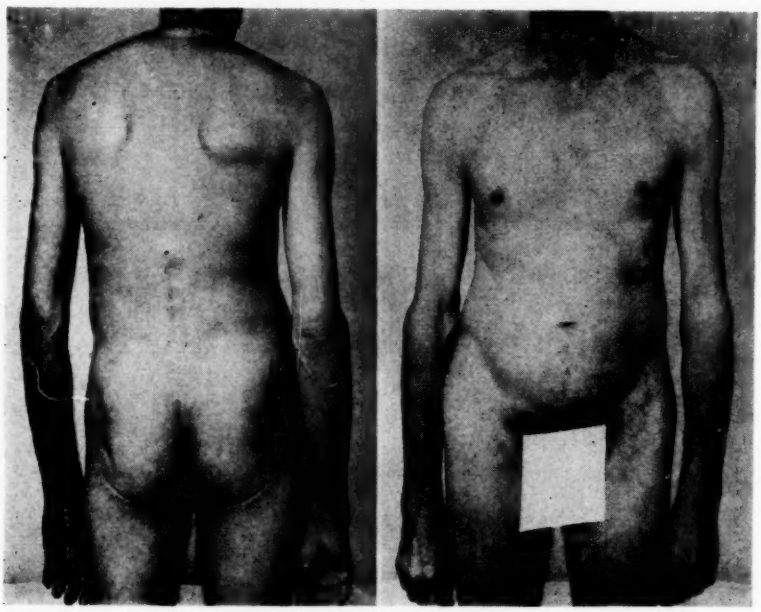


Figure 2.
Case 1, August 20, 1951. Normal skin.

DISCUSSION

In the first case, BAL was employed with no improvement. The dermatitis spread and increased in severity to such an extent that the patient was considered seriously ill. Cortisone was started with dramatic initial improvement, but with exacerbation when the dose was decreased. ACTH initially met with no significant improvement. When both drugs were discontinued, however, there was a marked exacerbation of the dermatitis. When ACTH was used a second time, there was a marked decrease of the dermatitis with subsequent complete clearing of the skin.

In the second case, BAL was employed for only

2 days, but, during these 2 days, the rash rapidly increased in severity. After treatment was started with ACTH, there was improvement of the dermatitis within 18 hours and disappearance after 3 days of treatment.

Conclusion

1. Two cases of gold dermatitis are presented, both the result of intramuscular treatment with aurothiomalate (myochrysine).

2. The first case failed to respond to treatment with BAL but subsequently responded well to alternating courses of ACTH and cortisone.

3. The second of these also failed to respond to treatment with BAL but healed rapidly with ACTH.

4. The favorable response of these 2 cases indicates that ACTH and cortisone influence favorably the course of gold dermatitis, and are useful drugs in the treatment of this condition, especially in those cases which fail to respond to treatment with BAL.

1200 East Broad Street. (E.C.T.)

Bibliography

1. Cohen, A.; Goldman, J., and Dubbs, A. W.: Treatment of Acute Gold and Arsenic Poisoning; Use of BAL (2, 3 Dimercatopropanol, British Anti-Lewisite), J.A.M.A., **133**:749-752, March 15, 1947.
2. Davison, R.: BAL Therapy of Dermatitis Caused by Injections of Gold Salts, Stanford M. Bull., **5**:37-39, February, 1947.
3. Simpson, N. R. W.: Treatment of Gold Dermatitis by BAL, Brit. M. J., **1**:545-546, March 20, 1948.
4. Margolis, H. M., and Caplan, P. S.: BAL in Treatment of Toxicity from Gold, Ann. Int. Med., **27**:353-360, September, 1947.
5. Macleod, J. G.: BAL in Treatment of Gold Toxicity, Ann. Rheumat. Dis., **7**:143-150, September, 1948.
6. Steinberg, C. L., and Roodenburg, A. I.: Successful Treatment of Dermatitis Due to Chrysotherapy with Adrenocorticotrophic Hormone, J.A.M.A., **146**:1225-6, July 28, 1951.

New Method for Weighing Bedridden Patients.

A simple apparatus for weighing patients who are confined to bed was described in the August 30 Journal of the American Medical Association. Weight changes are important factors in many medical cases. In an article written by Dr. John V. Galgiani, of the Hospital for Women and Children, San Francisco, the apparatus was described as a lifting lever and scales hung over the patient's bed from any type of overhead frame.

A lifting board, a 2 x 6 foot sheet of ¾ inch plywood, is slid under the patient, and four lifting wires are attached to the corners of the board by snap hooks. The weighing apparatus with the patient is raised an inch or two above the bed and the weight determined, he stated, adding:

"This apparatus has been found to be inexpensive, easily constructed, and accurate and safe in operation. It was built in the maintenance shop of a hospital and required only materials readily available."

XUM

THE ROLE OF THE CLEFT PALATE TEAM

LOUIS S. LEO, M.D.,
Norfolk, Virginia.

For the past five years it has been apparent that there has been a trend towards plastic surgery, which is proof that people have developed a great many anxieties concerning their physical appearance. On the other hand, there has been a trend in surgery to reach a high point of technical dexterity, and the results of this surgery, cosmetically, have greatly improved as compared to former years. There does seem to be, however, a tendency to concentrate so much on the defect and a perfect anatomical result that the patient as a whole is sometimes forgotten. Cases cannot be surveyed by the surgeon only as a perfect apposition of the parts, as he must consider functional developments or even functional faults that will follow his application of surgery. As a result of this it behooves all of us to consider these patients as a whole and therefore necessitates going far afield, enlisting the aid of the allied specialties, so that, in the end, we have a completely rehabilitated and normal individual. This individual could not attain this perfection by the efforts of any one individual; by all working together as a team, perfect results, both anatomically and functionally, can be attained.

It has been estimated that cleft palate and hare lip tend to occur approximately once in every 900 births. Staige Davis states the incidence about once in 915 births, while Peron in Paris gives the figures as once in 942 births. In Denmark Fogh-Anderson finds a somewhat higher incidence of 1.5 per 1000. It is therefore the most frequent congenital defect which we must deal with, and the disfigurement is as great as any. It tends to occur more frequently in boys than in girls. Warren B. Davis gives a proportion in a series of cases of 56% boys and 44% girls. In a series of 252 cases done in England, 55% were boys, and 45% girls. It occasionally occurs more than once in the same family. In the 252 cases in the English series it occurred twice in three families.

Little is known as to the cause of congenital clefts of the palate and the lip, although various suggestions have been put forward. Heredity and physiological deficiency contribute to a large degree and many mothers attribute it to some shock experienced during pregnancy. To refute this, however, it is generally found that the alleged shock occurred after the tenth week of embryo life, by which time the processes involved should have been united. This is therefore easily discounted.

Many investigators have studied this question and agree in thinking that heredity plays an important part in the occurrence of clefts, although the defect in the family history is not necessarily a cleft palate and may have been some other congenital malformation, such as spina bifida, club foot, or absence of upper lateral incisor teeth. Other factors examined by investigators include the age of the mother, her mentality and health, extreme differences in age of parents, and environment. Staige Davis points out that there is insufficient evidence to show that any of these has a determining influence on the incident of cleft palate. However, when considering the etiology of this condition in any large series of cases, it becomes apparent that it tends to occur more frequently among the poorer classes.

The problem of hare lip and cleft palate is not a surgical one that can be successfully completed by the surgeon alone. In most cases the treatment requires the co-operation of the surgeon, the dental surgeon, and the speech therapist. In spite of the fact that it is the objective of the cleft palate surgeon to create an anatomically and physiologically correct palate, there are failures. Many perfect anatomical results may be obtained, but physiologically or functionally, many of these cases will be failures. Naturally, it is the objective of the surgeon to obviate the need for other types of training, but this is not always attained. In a large proportion of cases, with the present day methods, children, submitting to successful operations before faulty speech habits have been allowed to develop, acquire normal speech during natural growth without special aid. However, until these ideal conditions become universal there will be those cases where operative procedures have been delayed and for whom surgery alone is insufficient for the achievement of normal speech. The surgeon who undertakes treatment in early infancy should realize fully the immense responsibility he is shouldering, for, by his efforts, a whole life may

be made or marred. He should have before him three objectives: namely, that his patient should look well, his patient should eat well, and most important, that his patient should speak well. There can be little doubt that the last named is the greatest of the three. A patient may do very well in life without good looks and the dental surgeon can do much to correct deficient masticatory function, but without clear speech, few people will proceed far and even the best efforts of the expert speech therapist will be of little avail if the palate has been ruined by ill-planned or badly executed surgical procedures. As a rule an ordinary cleft confined to the soft palate presents a relatively simple problem of closure in a young child, yet it is just such cases that the surgeon often fails to provide a mechanism capable of producing good speech. He carries out an approximation procedure, he reduces tension on his suture lines by fracturing the hamular processes and so reduces the pull of the tensor palatae muscles, but he often fails to produce any retroposition of the soft palate as a whole. His attention so many times is concentrated on the cleft alone that he fails to see the often large oronasal pharyngeal isthmus which the repaired palate will be called upon to close. These simple cases offer the best possible material for the provision of a complete patient and if operation is combined with proper follow-up procedure and is done at a time of life before definite speech habits have developed, there should be little need for more training other than that available in the child's home or family circle. At this time of life surgery causes little or no disturbance of tooth development. Any defects that now remain are concerned only with those dependant upon insufficiency of the oronasal sphincter. We consider three years of age to be the optimum time for closure of the palate, and hare lips, any time after birth when the infant has attained ten pounds or more.

Progressing from the simple cases (Illustration #1) to the most difficult are those complete bilateral clefts of the lip, gum, and palate (Illustration #2) associated with gross skeletal deformity. Treatment in these cases must necessarily be of several stages. Repair of the cleft lip and the floor of the nose brings the case to that of the cleft palate. In most cases, however, there is a great deal of skeletal deformity; partly as a result of this and unavoidable surgical trauma, teeth erupt irregularly and scar tissue contraction may make it difficult to obtain the requisite degree of retro-position to provide efficient oronasal sphincteric control.

Illus. 1—Simple unilateral cleft.

Also, trauma to growth centers may be an important factor. It is in these cases that the orthodontist can play a valuable role by correcting malposition of

Illus. 2—Complicated bilateral cleft and palate.

teeth to improve both masticatory function and speech. Physical appearances can be greatly im-

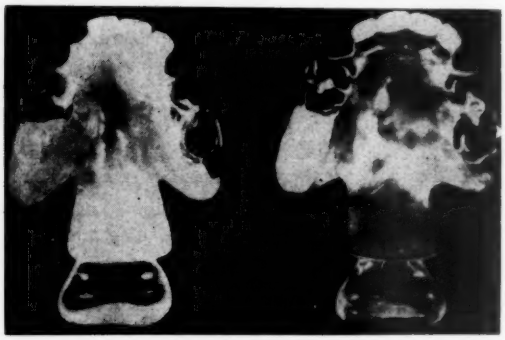
proved by dental prosthetics and appliances (Illustration #3).

Illus. 3—Child, age 2½ years with speech aid in position.

Many operations have been developed which adequately satisfy most of the cases. Great progress has been made in the treatment of the child. Recently an operation has been devised on the pharynx to assist in closure of the nasal pharyngeal isthmus during speech. In this operation the salpingopharyngeus muscle on each side of the pharynx is dissected from its lower end and swung upwards toward the midline to unite in a ridge across the posterior wall of the pharynx at a level slightly higher than the ridge of Passavant. The muscle action of this newly formed ridge is preserved and assists considerably in achieving the oronasal closure so necessary for speech. In 1925 Dorrance of Philadelphia published details of a procedure which he described as the "push-back" operation. This consisted of a two-stage operation in which the palate was displaced backwards in an effort to supply the necessary tissue to close the oronasal isthmus during speech. Both of these devices have attempted to give the patient that prime factor, a competent palatopharyngeal valve, and, therefore, a functional physiological mechanism for the production of normal speech.

There still remains a large number of cases which are considered inoperable from the surgical standpoint. These briefly are those cases of clefts that cannot be closed due to insufficiency of existing tissue. Also are those cases in which closure constitutes only thin membranous covering and physiologically is of little value. Then those cases must be considered which have been operated upon with poor results, such as late breaking down of the tissue and insufficient tissues with much scar to close the nasopharynx. In these the problem becomes one for the dentist, especially one skilled in the art of fitting and making prosthetics.

In patients who possess an inadequate velum or musculature that cannot function properly due to surgical trauma or otherwise, there remains the artificial velum or obturator (Illustration #4). These



Illus. 4—Prosthetic speech appliances

devices are usually made of vulcanite or acrylic with an obturator that closes the cleft and partially fills the space behind the short velum. It is not necessary that it fill the entire passage between the short velum, but it must occlude the space that is left when the contraction of the superior constrictor muscle forms Passavant's cushion in its constriction of the transverse diameter of the pharynx and approximates the borders of the cleft velum. These devices are made from impressions taken of the mouth and are held in place with clips attached to the teeth. (Illustration #5). The diligent patient will develop actions of the muscles to the extent that good speech can be obtained. Age is not a factor as prosthetics have been successfully used in children of three years.

When a person has learned to speak with a cleft in the velum, the stigma of "cleft palate" speech is due to the escape of air through the nasopharynx during the effort to produce sounds requiring its closure. Older children who have cleft palates are often found to be mentally backward, simply be-

cause they are ashamed to ask questions due to their speech difficulties. Lack of incentive can be attributed to consequent infrequency of correction during recitations. People around them do not understand their speech and many are considered "queer". This, however, can be eliminated by proper surgery or proper fitting of the obturator, with help in mastering the use of the new palate, whether it be their own or an artificial one.

Illus. 5—Child, age 2½ years. Inserting speech aid.

Every patient should have the benefit of lessons from a trained worker in the correction of speech and at the point, the speech therapist becomes the leading member of the team. For some time development of speech in a child with a cleft palate proceeds on similar lines to those of a normal child. Of the factors necessary for the development of speech only one is lacking, the requisite apparatus for normal articulation. The child is unable to divide completely the oral from the nasal cavities, so that the first sound produced in babbling will be nasalized. As the child at this stage is in no way attempting to imitate the sounds of his surroundings, nasalization is of no importance to him and such sounds serve to express his feelings and desires quite as satisfactorily as do the correct sounds of the normal child. The first obstacle to correct speech is encountered when an attempt is made to form consonant sounds. In the case of unrepaired clefts the air pressure necessary for producing this sound, as for any other explosive or fricative consonant, is unobtainable as there is no possibility of preventing the express of air through the cleft and nostrils. As the child progresses he may relinquish all attempts to produce good speech as hopeless and make no effort to imitate speech sounds beyond the nasal resonance and the use of the glottal stop or larynx to separate the string of nasalized vowel sounds which are all that he is able to produce. With a continued reproduction of such faulty movements, incorrect speech habits, so difficult to eradicate in later years, are steadily developed. Not only does the child become accustomed to the sounds he hears himself producing, these abnormal auditory images are also inevitably correlated in his mind with the normal sounds he hears around him, which he attempts to imitate. Because of these facts the child with a cleft palate is usually completely unconscious of any difference between the sounds he makes and those he hears from others. He becomes conscious of his defect only when he is old enough to realize that he differs from other children in his inability to make himself understood or when his companions ridicule his attempts at speech. Many cleft palate patients have been questioned, and we have yet to find one who was able, without training, to recognize any auditory difference between his own and correct articulation.

The author has attempted to show that the problem of clefts is not that of the surgeon or the dentist alone. Good results, and by that term we mean an anatomically correct lip and palate and a physiologically correct pharynx, become the joint responsibility of the surgeon, the dentist, and the speech therapist. To this group should also be added the psychiatrist for older children who have developed mental complexes. The problem can be solved only by co-operation between the groups mentioned along with complete post-operative care and re-education. Too much stress has perhaps been laid on surgical procedure and the surgeon often feels that with a united cleft, his work is completed. This, however, is certainly fallacious. In all this work much time and patience are required. Although faulty sounds can be corrected, speech itself cannot be taught as one might teach addition or subtraction. It is rather a process of gradual development along normal lines accompanied by a progressive elimination of the

faulty habits acquired before operation. Every case of cleft palate is a unique and a separate problem presenting a varying combination of difficulties, personal and otherwise; for this reason no two cases can be treated alike.

The speech therapist should be the best judge of the speech result and should be in a position to indicate which defects can and cannot be overcome by speech therapy. The surgeon, on the other hand, can indicate what surgical measures are possible or advisable to provide the improvement for which the whole team is striving. Again, this necessitates viewing the child as a whole and not a hole, merely to be closed.

We are indebted to Cloyd S. Harkins, D. D. S., Oseola Mills, Pennsylvania, for Illustrations No. 3, 4, and 5.

BIBLIOGRAPHY

1. Davis, J. Staige, Ann. of Surg. 1924, pp. 363-74.
2. Veau, Victor. Division Palatine, 1931, Masson et Cie, Paris.
3. Fogh-Anderson, Paul. Inheritance of Hare Lip and Cleft Palate. Arnold Busck, Copenhagen, 1942.
4. Davis, Warren B. Ann. of Surg. 1928, LXXXVII, p. 536.
5. Dorrance, George M. The Operative Story of the Cleft Palate, 1933.
6. Conway, Herbert. Plastic and Reconstructive Surgery, 7; March, 1951.
7. Harkins, Cloyd S. and Nitsche, M. Maria. Oral Prosthesis for Young Cleft Palate Children. Dental Digest, Dec. 1950.

421 Wainwright Building.

Industrial Health Program for the GP.

A program to interest general practitioners in industrial medicine recently was launched by the joint committee on education of the American Academy of General Practice and the Council on Industrial Health of the American Medical Association. The project proposes to encourage an understanding of industrial health problems by management and physicians and to develop an education program geared to the GP on both the undergraduate and postgraduate level.

Since more than 90 per cent of American industries employ less than 100 workers, the "family doctor" also must be educated on the part he can play in supervising and directing health and safety programs in small plants without interfering with his regular practice. The AMA's Council is prepared to assist local medical societies in carrying out educational programs designed to bring the employer and physician together by sponsoring local industrial health meetings.

MINOR DEFECTS OF THE EXTERNAL NOSE

Wm. Lawrence Gatewood, M.D.,
Richmond, Virginia

Plastic surgery of the nose is not a new development. Its origin is of the greatest antiquity. From time immemorial rhinoplasty has been performed in India for the relief of the disfigurement caused by punitive mutilation of the nose. Surgeons of all civilized and some uncivilized countries have from time to time evolved methods of repair for various disfigurements and in plastic reconstruction of the nose the principles laid down by the fathers of surgery are found still to be of general application.

In recent years the technic of surgery in all fields has been stepped up to the point of marked advancement, and in this advance plastic surgery of the nose has kept well out in the foreground, due largely to the efforts of Sir Harold Gilles, of London, and the late J. Eastman Sheehan, of New York, and their associates, during and following the initial world war.

The broad technical approach and the numerous possibilities in the surgical repair of the deformed nose is now becoming more familiar to many who are candidates for surgery which will correct external nasal defects. There is something quite Utopian about the eagerness with which both the medical profession and the laity have become interested in acquiring knowledge which serves to familiarize them with the possibilities in this field of surgery.

Because the nose protrudes from the center of the face, any deformity of its external outline tends to detract from the generally good appearance of all the other features of the face. There are many young women whose features are quite normal in appearance with the exception of the nose which may have multiple minor defects of its external contour.

There are many deviations from the normal coming together of anatomical structures of the nose which enter into the causation of certain disfigurements. The superior and inferior lateral cartilages may be enlarged or twisted, giving the tip of the nose a bulbous or nodular appearance. The cartilaginous and bony dorsal line may present irregularities due to a sagging of portions of these structures, producing an unsightly profile. When the width and length are out of proportion to the size of the face, this materially detracts from the appearance as a whole. All of these and more of the minor abnormalities, some of which have been enumerated here, can easily be made to respond to a simple type of surgery. The reaction and discomfort on the part of the patient following the surgical treatment of such conditions is extremely slight, and the ultimate good result can soon be anticipated. When the correction of these minor multiple malformations is effected and the parts are thoroughly healed, there should not be the slightest remaining evidence to reveal that surgery had been undertaken. The steps necessary to effect these slight changes are most simple and the required surgical technic is almost completely devoid of difficulties, producing an outcome that is satisfying to both the patient and the surgeon.

It must be remembered that the majority of deformities encountered in civilian life are congenital or developmental deviations from the so-called "normal". This normal is a purely fictional term, for the borderlines of normalcy in physical appearance are as indefinite and flexible as are those of human behavior.

While many of these lesser conditions complained of are obvious and self-evident, some are so mild as to be scarcely noticeable to others though they are of the utmost significance to the patient, causing them great mental stress and unhappiness. This, as we have learned from the newer concepts of psychosomatic medicine, can be responsible for much dysfunction of otherwise normal organic activity. With those so afflicted elimination of the existing disfigurement, no matter how mild, may correct these dysfunctions. Thus plastic surgery is in many cases a practical means of psychotherapy.

1635-A Monument Avenue.

XUM

ACUTE FIBRINOUS BRONCHIOLITIS WITH PARTIAL PULMONARY ATELECTASIS IN AN INFANT EIGHT MONTHS OF AGE

Report of a Case

RUTH BARNHART, M.D.,
Roanoke, Virginia
CAROLYN MCCUE, M.D.,**
and
PORTER P. VINSON, M.D.,*
Richmond, Virginia

Fibrinous bronchitis with the formation of complete or partial bronchial casts is not infrequent in adults who suffer from chronic asthmatic bronchitis. The prognosis in such cases depends upon the degree of pulmonary fibrosis and the formation of casts has little or no clinical significance.

In patients in whom acute bronchiolitis is associated with development of casts the prognosis is more grave, especially in infants or small children. Fortunately this latter condition is seldom observed and for this reason the following case is reported.

REPORT OF CASE

A baby boy eight months of age had developed eczema eleven days after birth, but with dietary restrictions this condition had gradually improved and he seemed normal in other respects.

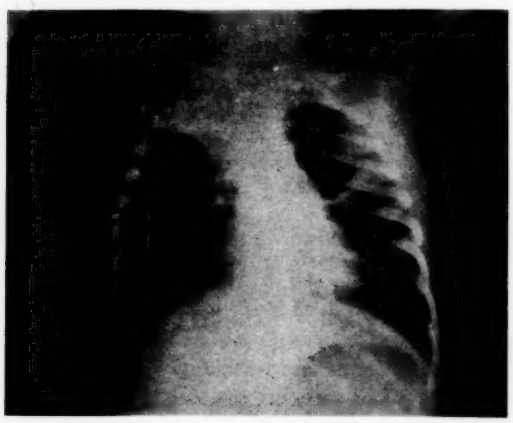


Fig. 1.—Roentgenogram showing atelectasis of the right upper lobe.

On October 31, 1951, the child developed evidence of a mild upper respiratory infection with watering of the eyes and nasal discharge, but without elevation of temperature.

He was restless and slept poorly that night. The following day terramycin was administered but was partially vomited. On November 2 there was fever of 101° and a raspy cough was associated with dyspnea. Because of increasing severity of dyspnea oxygen was started early in the morning on November 4.

Penicillin, cortone, chloromycetin, and finally aureomycin, were given without apparent benefit.

Roentgenoscopic examination revealed atelectasis of the upper lobe of the right lung (fig. 1), and breath sounds were absent over this area. There was diffuse wheezing and coarse rales and rhonchi over the left lung and over the lower lobe of the right lung. The patient was placed in oxygen and given adrenalin in oil.

Fig. 2.—Bronchial cast of the upper lobe of the right lung.

*Professor of Bronchoscopy, Esophagoscopy and Gastroscopy, Medical College of Virginia.
**Assistant Professor of Pediatrics, Medical College of Virginia.

About eight o'clock on the evening of November 4 the child had a severe attack of coughing and vomited, after which the nurse saw a white object on the back of his tongue. When this was removed it proved to be a cast of the bronchi of the entire upper lobe of the right lung (fig. 2). The child's general condition improved at once, breath sounds became audible throughout both lungs and the temperature was normal within twenty-four hours. A roentgenogram made on November 6 showed complete clearing of the area of atelectasis (fig. 3). The child was permitted to return home on November 11.

Fig. 3.—Normal roentgenogram after spontaneous expulsion of the bronchial cast.

On December 21, 1951, he developed a cold with wheezing respirations that required a few days' hospitalization, but the administration of penicillin and aureomycin was followed by prompt recovery. Roentgenoscopic examination of the chest did not reveal any abnormality. Since that time he has remained well except for persistence of a mild degree of eczema.

AMA Prepares New Health Exhibit.

Designed for lay audiences, a new portable exhibit entitled "Health-1952" will be available by mid-September from the AMA's Bureau of Exhibits for state and county medical societies. The exhibit presents an over-all picture of health conditions in the United States at the present time. The first panel, containing a large, colored modern adaptation of Sir Luke Fildes' painting, "The Doctor," emphasizes improved health conditions in the country today—showing that life expectancy has increased, tuberculosis, diphtheria and pneumonia deaths have skidded to an all-time low, mothers and babies have a much greater chance of surviving today. The second theme shows that Americans require less working time to pay for medical care today as compared with 15 years ago. Finally, the exhibit points out that today there is an easier way to pay for medical care—through voluntary health insurance.

The Bureau plans to revise and bring the exhibit up to date each year. The only cost involved to medical societies will be the shipping charges both ways.

XUM

COMBINED NITROGEN MUSTARD AND SINGLE DOSE IRRADIATION TREATMENT OF LYMPHOMATA AND OTHER MALIGNANT TUMORS*

LESLIE W. ROSE, JR., M.D.,
H. ST. GEORGE TUCKER, JR., M.D.,
SAMUEL RICHMAN, M.D.,
and
JOHN P. WILLIAMS, M.D.,
Richmond, Virginia

Three years ago there were presented to this Society observations on the use of nitrogen mustard in the treatment of Hodgkin's disease. Experience has shown that this agent can produce prompt clinical remissions in a high percentage of patients, even where the disease is far advanced. The remissions produced, however, tend to be brief; and lymph nodes which have regressed following treatment tend to recur. In general, more complete resolution of nodes can be achieved by local irradiation, and the results are likely to be more lasting. Nitrogen mustard is useful in attacking the disease diffusely throughout the body, while irradiation has a more potent effect on localized nodes.

It seemed desirable to find a suitable technique for combining these two types of therapy, in the hope that the two together might have a summative effect in destroying tumor tissue. To accomplish this the most feasible plan seemed to be the administration of a single large dose of nitrogen mustard followed immediately by a single large dose of irradiation over one or more principal tumor sites. In September, 1948, such a program was begun at the Richmond Veteran's Administration Hospital. Patients with far advanced lymphomata or other neoplasms were selected for this type of treatment. This paper reports observations of the toxic effects and evaluation of the results obtained in 52 patients so treated.

MATERIAL

The patients were all males between the ages of 23 and 71 years. All but four were white.

Diagnoses are listed in Table I, all diagnoses being established by biopsy or post-mortem findings. Autopsy was performed on 12 of the 17 patients dying in the hospital.

These patients were treated between September, 1948, and December, 1950. Follow-up observations continued to July, 1950, and all but one patient was followed to that date or to the time of death if sooner.

TABLE I

DIAGNOSIS

Hodgkin's Disease	26
Lymphosarcoma	6
Reticulum Cell Sarcoma	1
Carcinoma of Lung	10
Carcinoma of Rectum	2
Carcinoma of Larynx	1
Mixed Tumor of the Parotid	1
Adenocarcinoma of the Parotid	1
Sarcoma (chondrosarcoma of thigh)	2
Medulloblastoma Cerebellum	1
Teratoma Testis	1
	52

TREATMENT PROGRAM

Many of the patients were severely ill at the time of treatment, but treatment was withheld if the patient was considered too ill to withstand the expected nausea and vomiting, or (except in Case 1) if the white blood count was below 4,000. Severely anemic patients were transfused until the hemoglobin reached a level of 12 grams or more before treatment.

Nitrogen mustard (methyl bis-beta-chloroethylamine hydrochloride), 0.3 mgm. per kilogram of body weight, was injected over a two minute period into the tubing of a running saline intravenous infusion. After receiving this the patient was immediately sent to the X-ray Department where irradiation was directed to one or more tumor sites.

For irradiation, the physical factors employed were 250 kilo-volts with a half-value layer of 1.6 mm. copper.

The size and number of portals and the target

From the Medical Service, McGuire Veterans Administration Hospital, Richmond, Virginia.

Sponsored by the Veterans Administration and published with the approval of the Chief Medical Director. The statements and conclusions published by the authors are a result of their own study and do not necessarily reflect the opinion or policy of the Veterans Administration.

*Read before the annual meeting of The Medical Society of Virginia, at Virginia Beach, October 7-10, 1951.

skin distances varied with the individual patient, depending upon the extent of the disease and the thickness of the area irradiated. The initial dose given was 600 Roentgens to the estimated center of the neoplasm. Later this tumor dose was increased to 800r, and to 1200r in certain cases.

To allay nausea and vomiting patients were treated in a fasting state, with full dosage of atropine and heavy sedation with barbiturates being given during the remainder of the treatment day, and the subsequent diet as tolerated. As more experience was gained it was found that sedation was the most effective means of controlling the post-treatment nausea. One method employed was allowing the patient a light breakfast, with-holding lunch, and administering the treatment in the afternoon. After the patient was returned to the ward from the X-ray Department intravenous sodium amytal was given until deep sleep was produced. Many patients thus treated were able to sleep through the night and awake the next morning with minimal symptoms referable to the treatment.

Complete blood counts were done twice weekly for three weeks post-treatment, or until there was return to normal.

It was initially planned to repeat the combined treatment at monthly intervals for three courses provided blood counts were satisfactory. This plan was later modified so that subsequent treatment was given according to the condition of the individual patient. Treatment was not repeated in less than three weeks, and only then if the blood counts had returned to normal.

Toxic Effects

The toxic reactions following the administration of nitrogen mustard have been previously described.[1] They are (1) thrombosis of the injected vein, (2) nausea and vomiting, and (3) blood depression. The effects of X-ray in the doses used in this program are usually limited to nausea, vomiting, anorexia and malaise, or to the local effects on the skin.

One patient developed a thrombophlebitis of the injected vein which cleared without sequelae.

Nausea and vomiting occurred in all of the earlier patients, but as heavier sedation was used this was greatly diminished. Many of the patients had no symptoms referable to the treatment, especially those who were treated in the afternoon and given intravenous sodium amytal. No cases of pernicious vomiting were encountered.

Diarrhea in one patient was controlled with Metamucil and no disturbance in fluid or electrolyte balance occurred.

Twenty-two (42%) of the patients treated showed a fall in the white blood cells to levels below 4,000/cu.mm. Of these 8 reached a level between 3,000 and 4,000; 7 fell to between 2,000 and 3,000; 4 dropped to between 1,000 and 2,000; and 3 were below 1,000. None of those patients in whom the count remained above 1,000 developed any signs or symptoms referable to the leukopenia, and in all the counts returned to normal levels within 4 weeks of treatment without transfusions. Of the 3 patients showing a fall to below 1,000, two had a return to normal levels with the aid of multiple transfusions and no signs of agranulocytosis were noted. One patient (Case 1) whose disease was far advanced and progressing rapidly was treated when the white blood cell count was only 3,200/cu.mm. He developed an agranulocytosis with total count of 400/cu.mm., and showed severe sepsis, necrotic pharyngeal ulcerations, nasal furunculosis and purpuric manifestations. Transfusions were given freely, and the white blood count had risen to 1,800/cu.mm. when death occurred three weeks post-treatment. Although this patient was in an almost terminal state prior to treatment it was felt that the severe bone marrow depression was at least a contributing cause of death.

In subsequent cases treatment was not given, regardless of the indications or urgency, unless the white blood count was above 4,000/cu.mm.

Serial platelet counts were done in about one-half the cases. As a rule the platelet counts followed the level of the granulocytes and, except in the first patient, no instances of bleeding occurred.

No significant fall in the level of hemoglobin could be attributed to the treatment. Indeed, those patients requiring multiple transfusions to correct severe anemia prior to treatment often showed a post-treatment rise in hemoglobin, or at least the hemoglobin ceased to fall when a good clinical remission had been obtained. As exacerbations of the disease appeared, progressive anemia would again be apparent.

One patient (Case 7) complained of lethargy and mild headache after treatment; then, on the 7th

XUM

TABLE II

Patient	Age and Race	Duration of Disease in Months	Previous Therapy			Rate of Progression	General Condition	Site(s) of Major Disease
			Type (1)	Results	Duration of Remission			
								HODGKIN'S
1. A.J.	W-37	2	No previous t	reatment		Rapid	Poor	Generalized
2. D.C.	W-27	8	X-ray 1-(9) 2-(2) 3-(1)	 Good Poor None	 4 mos. No remission Progressing During Rx.	Rapid	Poor	Generalized
3. G.P.	W-33	12	No previous t	reatment		Rapid	Fair	Generalized
4. W.S.	W-32	2	None	None	None	Slowly progressive	Good	Left neck
5. H.C.	C-37	31	X-ray 1-(31) 2-(24) HN2 1-(19) 2-(7) 3-(3)	 Poor Poor Good Poor None	 No remission Progression continued 12 mos. No remission No remission	Slowly progressive disease	Fair	Peripheral nodes and 4th and 5th dorsal vertebrae
6. R.A.	W-39	64	X-ray (64)	Good	48 mos.	Moderately rapid	Fair	Mediastinum and abdomen
7. W.H.	W-25	60	X-ray 1-(60) 2-(48) 3-(24) 4-(12)	 Good Good Good Good	 12 mos. 24 mos. 12 mos. 12 mos.	Slowly progressive	Good	Cervical nodes
8. J.S.	W-54	12	X-ray (7)	Good	5 mos.	Rapid	Fair	Generalized
9. J.C.	W-44	5	None			Slowly progressive	Good	Generalized
10. W.D.	W-22		X-ray 1-(44) 2-(21) 3-(9)	 Good Good Good	 23 mos. 12 mos. 6 mos.	Moderately rapid progression	Poor	Generalized
11. G.S.	W-34	6	None			Slowly progressive	Good	Neck and mediastinum
12. W.S.	W-54	60	None			Slowly progressive	Fair	Neck, axillae and abdomen
13. D.S.	W-24	2	None			Rapid	Fair	Neck, axillae, inguinal, mediastinum

(1) Time in months prior to first combination treatment.
(2) Time interval since the previous combined treatment.
(3) Time after last combination treatment except as otherwise noted.
(4) Time interval from the last combined treatment.

TABLE II

Symptoms	Combined Therapy(2)	Response	Duration of Remission	Subsequent Therapy(3)	Follow-Up Status(4)
DISEASE					
Fever, weight loss, weakness #	1. Cervical and abdominal 2. Abd. (6 wks.) 3. Mediastinum (1 mo.)	Slight Fair Slight	18 days 18 days 6 days	None	Died—3 months
Fever, weight loss, weakness	1. Abdomen 2. Abd. (2 mos.) 3. Abd. (1 mo.)	Good Fair Fair	2 mos. 1 mo. 2 wks.	None	Died—6 months
Fever, weight loss	1. Mediastinum 2. Mediastinum (3 mos.) 3. Abd. (2 mos.)	Fair Fair None	4 mcs.	HN2 alone between 2 and 3	Died—7 months
Local swelling	1. Neck 2. Neck (3 wks.) 3. Neck (2 wks) 4. Med'nm (16 mos.)	Good Good	15 mos. 13 mos.	X-ray for general involvement 13 mcs. after Rx #4 HN2 14 mos. after Rx #4	Alive with generalized progressive disease—33 months
Local swelling and back pain	1. Spine and axilla 2. Ing. nodes (1 mo.) 3. Abdomen (5 mos.) 4. Ing. nodes (4 mos.)	None None None None		HN2 alone 2 wks. after Rx #2 X-ray alone to spine and peripheral nodes with no response.	Died—21 months
Fever, weight loss, weakness	1. Abd. 2. Abd. (2 wks.) 3. Abd. (3 wks.) 4. Abd. (3 mos.)	Good Fair	3 mos. 2 wks.	HN2 alone (2 mos.) no response	Died—9 months
Local swelling only	1. Neck	Good (but had a CNS reaction)	15 mos.	X-ray (15 mos.) to local nodes X-ray (21 mos.) to local nodes	Alive with no evidence of disease—26 months
Fever, local swelling, weight loss, abdominal pain	1. Abd. 2. Abd. (1 mo.) 3. Abd. (1 mo.)	Slight Slight None	26 days 15 days	None	Died—4 months
Fever, weight loss, weakness	1. Abd. 2. Med. (3 wks.) 3. Med. (6 wks.)	Good	26 mos.	None	Alive—no evidence of disease after 26 months
Fever, weight loss, nausea, vomiting and abdominal pain	1. Abd. 2. Abd. (1 mo.)	Good	19 mos.	X-ray (20 mos.) HN2 alone (21 mos.) X-ray (25 mos.)	Alive with generalized disease progressing, 24 months
Local swelling in neck	1. Neck and Med. 2. Same (6 wks.) 3. Med. (5 wks.)	Good	9 mos.	None	Alive—no evidence of disease when last seen after 9 months
Weight loss, nausea, vomiting	1. Abd. 2. Abd.	Good	6 mos.	X-ray (6 mos.)	Alive with no evidence of disease after 26 months
Weight loss, fever	1. Med. 2. Med. (1 mo.)	Good	9 mos.	(1) HN2 (1 mo.) well at time (2) X-ray (8 mos.) (3) X-ray (18 mos.)	Well—28 months

XUM

TABLE II—Con

Patient	Age and Race	Duration of Disease in Months	Previous Therapy			Rate of Progression	General Condition	Site(s) of Major Disease	Sy
			Type (1)	Results	Duration of Remission				
14. G.A.	W-28	24	X-ray (18) (6)	 Good Poor	 6 mos. 1 mo.	Rapid	Fair	Neck, axilla, inguinal, mediastinum	Cough, weakn
15. J.C.	W-28	23	X-ray (18) HN2(4) HN2(3)	Good Good Good	2 mos. 1 mo. 3 mos.	Moderate	Poor	Generalized	Fever, nause weakn
16. C.B.	W-24	10	None			Moderate	Good	Neck, axillae, mediastinum	None
17. L.A.	W-23	5	HN2(3) HN2(1)	Good None	2 mos.	Rapid	Fair	Generalized	Fever, weakn
18. R.R.	W-44	4	None			Moderate	Fair	Neck, abdomen	Fever, weakn
19. W.P.	W-54	11	X-ray(9) HN2(5) HN2(1)	Good Fair Fair	4 mos. 1 mo. 2 wks.	Rapid	Poor	Abdomen	Weight anemi
20. B.P.	W-58	14	X-ray(9) HN2(9) HN2(3)	Good Good Fair	 5 mos. 2 mos.	Rapid	Poor	Generalized with ascites	Weight ness,
21. E.C.	W-28	21	X-ray(19) X-ray(8) X-ray(6) X-ray(4)	Good Fair Fair Fair	11 mos. 6 wks. 6 wks. 6 wks.	Rapid	Poor	Generalized, including vertebrae	Fever, edema
22. H.M.	W-38	10	X-ray(9) HN2(5) Cortisone HN2(4)	Good Fair None	3 mos. 1 mo.	Rapid	Poor	Generalized	Fever, anemi
23. L.A.	W-27	62	X-ray(61) X-ray(29)	Good Good	32 mos. 24 mos.	Slow	Fair	Generalized	Weakn weight
24. W.F.	W-38	17	HN2(7)	None		Slow	Fair	Generalized	Fever, edema anemi
25. E.B.	W-26	3	None			Rapid	Poor	Kidneys, mediastinum, neck	Headach albumi
26. H.A.	W-28	24	X-ray(22) X-ray(18) X-ray(17)	Fair Fair Good	4 mos. 1 mo. 15 mos.	Rapid	Poor	Abdominal	Fever, anorex
								LYMPH	SARCOM
27. E.M.	W-26	2	None			Rapid	Poor	Inguinal, axillary, skin	Local sw pheden
28. H.T.	W-40	18	X-ray(11) X-ray(8) X-ray(5)	Good Good Good	3 mos. 3 mos. 3 mos.	Rapid	Good	Peripheral node and skin	Pruritus
29. C.T.	W-46	48	X-ray(24) X-ray(18) X-ray(12) HN2(10)	Good Fair Poor Poor	6 mos. 6 mos.	Slowly progressive	Fair	Generalized (main abdominal)	Weight l inal pa weakne

TABLE II—Continued

of	Symptoms	Combined Therapy(2)	Response	Duration of Remission	Subsequent Therapy(3)	Follow-Up Status(4)
a, ingui-iastinum	Cough, fever, pain, weakness, anemia	1. Med. 2. Neck (1 mo.) 3. Med. (1 mo.)	Poor None		None	Died—2½ months
l	Fever, weight loss, nausea, vomiting, weakness	1. Abdomen 2. Abdomen, Inguinal (13 mos.)	Good Good	9 mos. 3 mos.	HN2 (9 mos. after 1st comb. Rx.) X-ray (3 mos.)	Weak, but ambulatory —17 months
lae, me n	None	1. Neck Mediastinum	Good	2 mos.	HN2 (2 mos.)	Well—18 months
d	Fever, pain, anemia, weakness	1. Abdomen 2. Abd. (2 mos.) 3. Med. (6 wks.)	Fair Fair None	3 wks. 1 mo.	None	Died—4 months
omen	Fever, weight loss, weakness	1. Abd. 2. Abd. (7 mos.)	Fair None	6 wks.	HN2 (2 mos. after 1st comb. Rx) HN2 (4 mos. after 1st comb. Rx)	Died—10 months
	Weight loss, fever, anemia	1. Abdomen	None		None	Died—2 weeks
d with	Weight loss, weakness, dysphagia	1. Abdomen	None		X-ray (1 wk.) to pharynx	Died—2 months
d, inclu ebrae	Fever, weight loss, edema, ascites, pain	1. Abdomen 2. Neck (1 mo.)	Poor None	2 wks.	None	Died—2 months
d	Fever, weight loss, anemia	1. Abd.	Poor	2 wks.	None	Died—1½ months
d	Weakness, fever, weight loss, pain	1. Abd. 2. Abd. (1 mo.)	Good	6 mos.	Partial gastric resection, developed irradiation injury to stomach	Died—11 months
d	Fever, weight loss, edema, pruritis, anemia	1. Abd. 2. Abd. (4 mos.) 3. Abd. (6 mos.)	Fair Fair Good	2 mos. 1 mo. 1 mo.	X-ray (2 wks.) after 1st comb. Rx)	Weak, but ambulatory —7 months
mediast ck	Headache, anasarca, albuminuria	1. Kidneys	Good	11 mos.	None	Asymptomatic—no evidence of disease—11 months
l	Fever, weight loss, anorexia	1. Abd.	Poor	1 mo.	None	Admitted to another hospital in (?) terminal state—6 weeks
LYMPH	SARCOMATA					
axillary	Local swelling, lymphedema, wt. loss	1. Inguinal	Good	6 wks.	None	Died—3½ months
al node	Pruritus	1. Area of skin of back	Good (for irradiated area)		HN2 (2 wks.) HN2 (2 wks.)	Died—4 months
d (main nal)	Weight loss, abdominal pain, nausea, weakness, vomiting	1. Axillae	Fair	3 wks.	HN2 (3 wks.) HN2 (6 wks.) HN2 (5 mos.)	No response to HN2 Died—7 months

XUM

TABLE I—Continued

Patient	Age and Race	Duration of Disease in Months	Previous Therapy			Rate of Progression	General Condition	Site(s) of Major Disease
			Type (1)	Results	Duration of Remission			
30. C.T.	W-29	24	X-ray(24) X-ray(12) X-ray(3)	Good Good Good	12 mos. 9 mos. 3 mos.	Rapid	Good	Generalized
31. R.F.	W-52	33	X-ray(32) X-ray(19) X-ray (13)	Good Good Fair	13 mos. 6 mos. 6 mos.	Slowly progressive	Fair	Abdominal, inguin
32. R.D.	W-64	7	None			Rapid	Poor	Generalized *plus* bone
33. B.B.	W-33	8	None			Rapid	Fair	All peripheral nod
								LUN
34. H.J.	W-50	16	X-ray(9) X-ray(6) X-ray(3) HN2(2) HN2(1)	Good Good Fair Good None	3 mos. 1 mo. 2 mos. 2 wks.	Rapid	Poor	Lung—to periphe nodes and liver
35. L.F.	W-53	2	None			Progressive	Fair	Lung and hilum
36. A.S.	W-62	13	None			Progressive	Fair	Lung and hilum
37. E.B.	W-50	1	HN2(1)	Fair	1 mo.	Rapid	Fair	Lung and hilum
38. J.P.	W-62	12	None			Rapid	Fair	Lung and hilum
39. H.M.	W-48	4	None			Rapid	Fair	Lung—large c vical node
40. I.L.	W-71	6	None			Rapid	Poor	Lung and hilum
41. H.H.	W-46	12	Pneumo-nectomy(8)	Good	8 mos.	Rapid	Poor	Lung, hilum a skull
42. M.P.	W-57	1	None			Rapid	Good	Lung, hilum a neck
43. J.W.	N-55	6	None			Rapid	Poor	Lung, pleurae, domen
								MISCELLANEO
44. C.W. Ca. of Recto-Signoid	W-38	12	Abdomino-perineal(8)	Good	8 mos.	Rapid	Poor	Generalized, dominal nodes mediastinum
45. W.D. Ca. of Larynx	W-50	12	X-ray(3)	None		Rapid	Poor	Larynx with monary spre

Sy
Local sw
Ascites, legs, dy
Pain, fe swellin
Weight lo
CANCER
Weight lo nal pain
Weight los
Cough, we
Weight lo tysis, ch
Weight lo weakness
Pain in cer
Weight lo ness, c chest pai
Weight los fever
Neck swelli
Dyspnea, wasting
TUMORS
Weight loss, nal pain, obstructio
Weight loss ness, dyspl pain

I—Continued

Symptoms	Combined Therapy(2)	Response	Duration of Remission	Subsequent Therapy(3)	Follow-Up Status(4)
Local swelling	1. Neck, axillae, inguinal 2. Abdomen (16 mos.)	Good None	3 mos.	X-ray to local nodes (3, 5, 9 and 12 mos.) HN2 (13 mos.) X-ray to abd. (16 mos.) all after 1st comb. Rx	Became refractory to all therapy Died—19 months
Ascites, edema of legs, dyspnea	1. Abdomen 2. Abdomen (6 wks.) 3. Abdomen (10 wks.)	Good Good	5 wks. 3 mos.	X-ray (3 mos.) X-ray (6 mos.)	Died—11 months
Pain, fever, local swelling	1. Iliac bones	Fair	2 wks.	None	Died—6 weeks
Weight loss, pain	1. Inguinal, cervical	Good	3 mos.	X-ray to multiple peripheral areas (3 wks.-2 mos.)	Ambulatory with progressing generalized disease—3 months
CANCERS					
Weight loss, abdominal pain, dyspnea	1. Mediastinum	None		None	Died—2 weeks
Weight loss, dyspnea	1. Mediastinum 2. Mediastinum (2 mos.)	Good	3 mos.	None	Died suddenly at home—cause unknown—3 months
Cough, weight loss	1. Lung	Good	2 wks.	Surgery (2 wks.)	Died (during surgery)—2 weeks
Weight loss, hemoptysis, chest pain	1. Mediastinum	Poor		None	Died—2 months
Weight loss, cough, weakness	1. Mediastinum	None		None known	Unknown—to home in terminal condition
Pain in cervical gland	1. Neck	None		None	Died—6 weeks
Weight loss, weakness, cough and chest pain	1. Mediastinum	Symptomatic only		None	Died—6 months
Weight loss, cough, fever	1. Skull	Local improvement only		None	Died—2 months
Neck swelling only	1. Mediastinum	Good	1 mo.	X-ray (1 mo.)	Died—4 months
Dyspnea, weakness, wasting	1. Mediastinum	None		None	Died—1 month
TUMORS					
Weight loss, abdominal pain, intestinal obstruction	1. Mediastinum	None		None	Died—4 months
Weight loss, weakness, dysphagia and pain	1. Mediastinum 2. Mediastinum (3 wks.)	Slight relief of pain only		Gastrostomy (1 mo.)	Died—5 months

XUM

TABLE II—Co

Patient	Age and Race	Duration of Disease in Months	Previous Therapy			Rate of Progression	General Condition	Site(s) of Major Disease	S
			Type (1)	Results	Duration of Remission				
46. P.K. Teratoma testicle	W-26	16	Orchidectomy and X-ray(13) X-ray (5)	Good Good	7 mos.	Rapid	Poor	Regional and mediastinal nodes	Weight ness pain
47. P.B. Mixed tumor parotid	W-38	56	Surgical excisions			Progressive	Good	Local and to lung and skull	Cough,
48. W.R. Ca. rectum	W-32	13	Surgery(12)			Slow Recurrence	Poor	Perineal and bladder	Pain an struct
49. J.S. Medulloblastoma cerebellum	W-27	28	X-ray(18) X-ray(10) X-ray(2)	Good Fair Fair	6 mos. 3 mos. 2 mos.	Rapid	Poor	Cerebellum with extension into spinal cord	Paralysi increa
50. P.L. Adeno-Ca. parotid	N-35	58	None			Rapid	Poor	Large parotid tumor with ulcerating skin metastases	Local loss, w
51. J.D. Chondrosarcoma of thigh	W-23	24	Amputation mid-thigh (23) Rt. lobectomy(8)	Good Good	14 mos. 6 mos.	Rapid	Good	Metastases in lung and mediastinum	Cough,
52. M.R. Sarcoma thigh	W-40	31	Amputation mid-thigh (30)	Good	12 mos.	Rapid	Poor	Tumor in stump with spread to lungs	Leg pain, pain, w

day, abruptly developed urinary retention, severe headache, mental confusion, areflexia of the entire right side, and papilledema. The spinal fluid was under increased pressure and showed a lymphocytosis and an increased protein content. With no specific therapy other than a retention catheter and maintenance of the fluid and electrolyte balance, the symptoms slowly subsided so that within a week the bladder function had returned and within two months all signs of any central nervous system disorder had completely disappeared. This patient has been followed over thirty months since this episode and at no time has there been evidence of Hodgkin's involvement of the central nervous system, although several local recurrences elsewhere have been treated subsequently with irradiation alone. It is thought that this reaction probably represented a direct toxic effect of nitrogen mustard on the central nervous system.

One patient (Case 23) received a total of 2,000r tumor dose to the retroperitoneal area in two courses one month apart. Five months later, at another hospital, he was subjected to a gastric resection because of abdominal pain and Roentgenographic evidence of pyloric obstruction. The gross specimen showed edema of the antrum and pylorus with a necrotic ulcer of the antrum. The microscopic picture was described as showing edema of the mucosa and "changes due to irradiation".

All patients developed varying degrees of pigmentation of the skin at the site of irradiation, but in no instance was ulceration or radio-necrosis of the skin encountered.

These observations suggest that the toxicity of the combined therapy is that which might be expected from the use of nitrogen mustard or X-ray alone. No additive toxic effects were demonstrable.

II—Continued

Symptoms	Combined Therapy (2)	Response	Duration of Remission	Subsequent Therapy (3)	Follow-Up Status (4)
Weight loss, weakness, abdominal pain	1. Abdominal	None		None	Died—1 month
Cough, local swelling	1. Right lung parotid 2. Skull	Good None	11 mos.	None	Pre-terminal state (cerebral spread)—25 months
Pain and urinary obstruction	1. Perineum	None		Nephrostomy	Terminal state—6 months
Paralysis, headache, increased I.C.P.	1. Cerebellum	Transient decrease in I.C.P.		None	Died—3 weeks
Local pain, weight loss, weakness	1. Parotid	None		None	Died—3 weeks
Cough, pain in chest	1. Mediastinum	None		X-ray (5 mos.)	Died—8 months
Leg pain, cough, chest pain, weakness	1. Lungs	None		None	Died—2 months

Results of Treatment

Hodgkin's disease: 26 patients with Hodgkin's disease received combined treatment. Data on these patients are summarized in Table II. The duration of the disease varied from 5 years to 2 months, but most patients were in an advanced stage at the time of treatment, with widespread dissemination and disabling symptoms. 16 patients had received previous treatment with either nitrogen mustard or irradiation.

Results of the combined treatment are recorded in Table II, with the evaluation of the degree of each remission produced and its duration. Results are described as good where definite remission occurred with very marked resolution of nodes or tumor masses, cessation of fever and other disabling symptoms, return of appetite and sense of well being and weight gain. These patients were able to leave the hospital and return to some sort of activity. Results are listed as fair where definite improvement occurred but resolution of the nodes or relief of symptoms was incomplete. Results are listed none or poor when beneficial effects were absent or so slight or transient as to be of no real value to the patient.

Significant remissions were produced in two-thirds of our patients. These were considered good in 13 and fair in 4. Nine patients received little or no benefit from treatment.

The duration of remissions produced varied from two weeks to 26 months. Ten patients obtained remissions lasting 6 months or longer. As would be expected, the longer remissions occurred most often in those patients whose underlying disease was slowly progressive. Several patients did obtain much longer remissions than would be expected considering the previous course of the disease. These results may reflect merely the extreme unpredictability of Hodgkin's disease.

XUM

It is of some interest, although of dubious statistical significance, to compare these results with those obtained in the earlier very similar series of 24 patients with Hodgkin's disease treated with nitrogen mustard alone.

TABLE III

REMISSIONS PRODUCED

	HN2 alone	(1st Treatment) HN2 plus X-ray
Good	10	13
Fair	6	4
None	8	9
Total	24	26

It appears that about the same proportion of patients may obtain remissions with nitrogen mustard alone as do with the combined therapy. However, when the duration of remissions is compared, there seems to be a decidedly larger number of long remissions when irradiation is added to the mustard therapy.

TABLE IV

DURATION OF REMISSIONS

Duration (months)	HN2 alone	HN2 plus X-ray
0	8	4
½	2	4
1	5	3
2	3	3
3	1	1
4	2	1
5	0	0
6	1	2
7-12	1	4
12 plus	0	4
unknown	1	0
Total	24	26

These results are not unexpected, considering the generally more lasting effect of irradiation. It was also our impression that the resolution of nodes receiving irradiation combined with nitrogen mustard was usually more complete than has been observed with nitrogen mustard alone.

Comparison of these results with those that might have been expected from irradiation alone is difficult. Probably equally good results could have been obtained in many cases by fractionated doses of X-rays. We have no specific evidence that destruction of tumor tissue by this method is greater than can be accomplished by irradiation alone. However, in the advanced stage of the disease presented by most of these patients, it has been our experience that prolonged irradiation of many sites is necessary to effect a remission; and this often cannot be accomplished simply from lack of time. We believe that the combined treatment has brought these patients under control much more promptly than would have irradiation alone, and that the completeness and duration of remissions produced are at least equal to those obtained by serial irradiation.

Where resolution of nodes or tumor was incomplete a month after treatment, the combined course was repeated provided blood counts were satisfactory. When relapse occurred after a satisfactory remission combined treatment was usually repeated; but when the recurrence was local only, irradiation alone was sometimes given. The results of subsequent courses of combined treatment in general paralleled those obtained initially. Some tendency to diminishing effectiveness of successive courses was observed, which is probably attributable to the natural progression of the disease.

At the present time 11 of the 26 patients are living.

Lymphosarcoma: Six patients with lymphosarcoma received combined treatment. All six had generalized disease and in four the rate of progression was rapid. Four patients had received previous irradiation.

The results of combined treatment were considered good in four and fair in two. Enlarged nodes decreased in size and symptoms were relieved. In one patient with hepato-splenomegaly and ascites the organs returned to normal size and the ascites was relieved for three months. All six patients have subsequently died with periods of survival ranging from 3 to 19 months after treatment.

In general, the results of combined treatment paralleled those of previous irradiation, but in two cases the combined treatment gave a decidedly better response.

Reticulum Cell Sarcoma: One patient with reticulum cell sarcoma was treated on two occasions. A good response lasting three months was obtained after the first treatment, but only fair improvement followed the second course. Subsequent treatment with irradiation alone also produced only fair results.

Carcinoma of the Lung: 10 patients with inoperable carcinoma of the lung were treated. In all

the cancer was growing rapidly. Four were in very poor general condition at the time of treatment and the response was nil. The other six patients obtained some degree of symptomatic improvement such as relief from pain or cough. In four there was definite clearing of the chest X-ray either from diminished secondary infection or from actual diminution in the size of mediastinal nodes. One patient with metastatic tumor to the skull had the irradiation directed to the skull with a decrease in the size of the tumor there, but with no effect on the size of the mediastinal masses to which no X-rays were directed. Five (50%) of the patients were dead within 2 months of therapy, and the other five died within six months of the combined treatment. One of the early deaths occurred during surgery undertaken when a review of the original lymph nodes obtained on exploratory thoracotomy failed to substantiate spread into the hilum.

These results indicate possible palliation of symptoms as a result of treatment, but it is doubtful that any lives were prolonged.

Miscellaneous Neoplasms: No beneficial effect of combined treatment was observed in two patients with carcinoma of the rectum; in one with carcinoma of the larynx; in one with adenocarcinoma of the parotid; in two with sarcomas of the thigh; or in one with teratoma testis. One patient with malignant mixed tumor of the parotid with local spread and pulmonary metastases showed marked clinical improvement following treatment. Serial chest radiographs showed almost complete clearing of the pulmonary metastases with no new lesions developing until 11 months later when lung lesions recurred and in addition skull metastases were noted. A second course of combined therapy with the irradiation directed to the skull was without beneficial effect. One patient with a cerebellar medulloblastoma showed transient relief of increased intracranial pressure following therapy but the course of the disease was unaltered.

DISCUSSION

This particular plan of therapy was chosen initially with the idea that nitrogen mustard and irradiation given in close sequence might have a summative effect in the destruction of tumor tissue, greater than the effect produced by either agent alone. As to whether this has been accomplished the results give no clear-cut answer. Tumor tissue has been destroyed, but nothing approaching total eradication has been seen and tumor has recurred locally in the most effectively treated sites.

It is probably fairer to state that this method of treatment combines the desirable palliative features of nitrogen mustard and of irradiation. The rapid and generalized effects of nitrogen mustard are obtained together with the more complete and lasting effects of local irradiation. Thus the clinical effects complement each other whether or not any summation occurs.

These cases demonstrate that the two agents can be combined with reasonable safety and without excessive destruction of bone marrow, provided leukopenia is not present prior to treatment. The leukopenia produced in some instances suggests, however, that maximum tolerated doses are being approached. The 0.3 mgm. per kilogram body weight dose of nitrogen mustard is probably maximal if irradiation is to be added. Our experience suggests that optimal irradiation effect can be obtained with tumor doses not exceeding 800r.

There may well be better ways of combining the nitrogen mustard and irradiation. If the effects are complementary rather than actually summative, the close timing of the two treatments may not be necessary. We have recently begun giving irradiation the day following the administration of nitrogen mustard. Roentgen therapy might be divided rather than given as a single dose. Only by extensive trial of various combinations can an optimal schedule be determined.

One very important merit of this particular program is the shortening of the period of hospitalization for the patient. The treatment can be rapidly given and in many instances the patient may be discharged in a few days to have the blood counts followed outside the hospital. For those patients with advanced disease and only a few months to live, palliation means but little if the remaining days are to be spent undergoing treatment in a hospital away from home and family.

CONCLUSIONS

1. Observations are presented on the combined use of nitrogen mustard and a single large dose of irradiation in the treatment of 52 patients with lymphomata and other malignant tumors.

XUM

2. This type of therapy is well tolerated, the toxic effects being usually no greater than with nitrogen mustard or irradiation alone.

3. This type of treatment has its greatest value in advanced cases of Hodgkin's disease where the beneficial effects of nitrogen mustard and irradiation appear to complement each other.

4. In lymphosarcoma and reticulum cell sarcoma the combined treatment may be of some value.

5. A definite palliative effect may be obtained in certain cases of inoperable carcinoma of the lung.

6. Results in other types of neoplasms generally are poor.

7. Other possible techniques of combining nitrogen mustard with irradiation are discussed.

5901 Patterson Avenue.

(*Dr. Rose*)

BIBLIOGRAPHY

(1) Tucker, H. St. G., Jr., and Kay, W. R.: Nitrogen Mustard Treatment of Hodgkin's Disease. Va. Med. Monthly, **76**:502, 1949.

Report Longevity of Patients with High Blood Pressure.

Patients with benign essential hypertension, a high blood pressure condition of long standing and unknown cause, may live a long and effective life. It has been estimated that most of the high blood pressure cases fall into that classification. The conclusion was based on an observation of 100 cases followed personally by Drs. James P. O'Hare and Robert B. Holden of the Peter Bent Brigham Hospital over periods ranging from 10 to 34 years, with an average of more than 17 years. Their report was published in the August 16 J.A.M.A.

The Boston doctors said that of the 100 patients, 47 are in "good" condition, 19 in a "fair" state of health and only five in "poor" condition. Twenty-nine deaths have occurred, the main causes being brain hemorrhages, blood clots and heart failure, complications which usually developed late in the disease.

There were 67 women and 33 men in the series, and this predominance of women may account for the longevity and generally favorable course, the doctors explained. They pointed out that it is generally agreed that women as a class withstand hypertension better than do men. The average age at onset of the disease was 45 years.

Knowledge of the good prospects for such patients should help to avoid creating "blood pressure neurotics."

Primaquine, New Drug, Prevents Malaria Relapse.

Announcement is made in the August 23 issue of the J.A.M.A. of the development of a new antimalarial, primaquine, which destroys the parasite causing relapsing malaria and is cited by U. S. Army medical authorities as the most effective preparation known for the prevention of relapses.

Reports on the new compound and on its therapeutic efficacy are contained in a series of four papers in the AMA Journal. The reports cover studies conducted by teams of malaria experts working under the sponsorship of the Office of the Surgeon General, U. S. Army, and the U. S. Public Health Service.

Primaquine was synthesized at Columbia University during the World War II antimalarial research program by Dr. R. C. Elderfield and associates.

PUBLIC HEALTH

Mack I. Shanholtz, M.D.
Virginia State Health Commissioner

More About Isoniazid and Its Derivatives

On June 4, 1952, the Federal Food and Drug Administration officially lifted its ban on use of isoniazid and its derivatives for other than research purposes. Since that date, the drugs have been available to all practicing physicians, and in drug stores upon prescription. During recent months additional information has been added to basic knowledge concerning action of the drugs. Some of these revelations are of vital significance for the physician who is now using or who plans to employ them as therapeutic agents.

A brief progress report of discoveries which, to date, have evolved from systematic study programs currently being conducted by a number of hospital groups and independent investigators, is presented editorially in the July 26 issue of the *Journal of the American Medical Association* under the title, "Caution in the Chemotherapy of Tuberculosis." First, this account states,

"These drugs have shown definite but limited therapeutic activity against human tuberculosis, but there is much concern among workers in this field that their potential value may rapidly be neutralized if they are used improperly or indiscriminately by those not trained in the treatment of tuberculosis."

Even specialists with years of experience in tuberculosis therapy are enjoined by some well-known investigators* to use the new agents "only in combination with another tuberculostatic drug effective against tubercle bacilli of the patient." They contend that when streptomycin and isoniazid are used consecutively, the tubercle bacillus becomes resistant to each in turn, regardless as to which has been administered first. No instance has been reported, to date, in vivo or in vitro where tubercle bacilli have become resistant to either streptomycin or isoniazid or both when administered concurrently.

To quote further from the Journal,

"They, like other forms of chemotherapy, must be used as adjuncts to the time-tested measures of bed rest, collapse therapy, and surgical procedures. Moreover, as adjuncts they have not yet proved clinically superior to, or even as effective as, the combination of streptomycin and *p*-aminosalicylic acid in the treatment of tuberculosis."

The Superintendent and Medical Director of one of Virginia's State Tuberculosis Sanatoria subscribes to an almost identical tentative conclusion in his 1952 Annual Report as follows:

"Our present impression is that this drug is perhaps not as good as streptomycin and PAS in the treatment of tuberculosis***."

Preliminary reports recently prepared by each of the three state sanatoria upon the first sixteen patients treated by isoniazid in these institutions tend to bear out this opinion. The Journal goes on to say,

"Still another hazard in the use of these drugs is that of inadequate dosage. Since there has not yet been time for adequate long-term evaluation of different dosage schedules for the different forms and stages of tuberculosis, it is obvious that no statement about optimum dosage or duration of administration can be made."***

"Random use of the drugs on an empirical basis can result only in waste, inefficiency, inconclusive results, and harm to some patients."

The editorial in The Journal further states:

"According to the Committee on Therapy of the American Trudeau Society, 'isolated instances of intractable asthma, persistent hypotension, and increased susceptibility to the effects of other drugs (particularly epinephrine, ephedrine, atrophine, and demerol) and even deaths have been reported in patients receiving isoniazid or its isoprophyl derivative, but the causal relationship has not been clearly established. Minor untoward effects which have been reported are hyperreflexia, constipation, postural hypotension and dizziness, difficulty in starting micturition, eosinophilia, and the appearance of casts, albumin, and reducing substances in the urine. Routine precautions during treatment should include frequent neurologic examinations, blood counts, urinalyses, and tests for renal and hepatic insufficiency. As both drugs are excreted through the kidneys, impairment of renal function may result in the cumulation of toxic concentrations of the drug in the body. For this reason, the renal function should be measured before treatment and, if it is impaired, the dose should be reduced accordingly.' "

Almost no undesirable side effects are recorded in the state sanatorium series; on the contrary, two patients previously described as "listless, sullen, depressed" became "alert, cheerful, interested in surroundings ***" during course of treatment. These patients had not been classified as mental patients.

The outstanding reference in the resume, how-

XUM

ever, is to a fact which heretofore has not been widely publicized, i. e. the very great tendency of the tubercle bacillus to become resistant when isoniazid is administered alone. Isoniazid, therefore, according to Grace, et al* should be given only with streptomycin and *p*-aminosalicylic acid to patients whose tubercle bacilli have not previously become resistant to streptomycin so that both drugs will be effective at the same time. Unfortunately, this recommendation will nullify completely one of the chief attributes of isoniazid—that of oral administration. Patients would still be required to take streptomycin by needle in order to take isoniazid by mouth.

No information is at hand on a possible combination of isoniazid and *p*-aminosalicylic acid. Should research show that the latter drug reduces the tendency of isoniazid (used alone) to build up resistant strains of tubercle bacilli, and should isoniazid be found eventually, in combination with *p*-aminosalicylic acid, to be essentially comparable in effectiveness to streptomycin and *p*-aminosalicylic acid, the need for hypodermic administration in tuberculosis drug therapy may yet be circumvented. In the meantime, according to the best available authority, The Journal of the American Medical Association, if isoniazid is to be used at all, the ideal or safest treatment, for other than research purposes, seems to be its concurrent administration with streptomycin and *p*-aminosalicylic acid, with appropriate safeguards, whenever drug therapy for tuberculosis appears to be indicated.

*Grace, Bryson, Szybalski, Demerec, Cold Spring Harbor, New York in a letter addressed to The Editor and published in the July 26, 1952 issue of *The Journal of the American Medical Association.*

MONTHLY REPORT OF THE BUREAU OF COMMUNICABLE DISEASE CONTROL

	Aug. 1952	Aug. 1951	Jan.-Aug. 1952	Jan.-Aug. 1951
Brucellosis	6	12	27	54
Diarrhea & Dysentery	352	423	1736	1765
Diphtheria	4	4	56	76
Hepatitis	64	1	483	12
Measles	175	163	15277	13681
Meningitis (Meningococcic)	11	4	139	87
Poliomyelitis	270	53	345	94
Rabies in Animals	20	30	346	148
Rocky Mt. Spotted Fever	18	17	60	52
Scarlet Fever	14	14	547	702
Tularemia	0	6	33	30
Typhoid & Paratyphoid	22	5	66	34

New Books.

The Tompkins-McCaw Library of the Medical College of Virginia, Richmond, announces the following new books on their shelves. These are available to our readers under usual library rules.

Bierman—Cancer learning in the medical school. 1952.

Cleckley—The mask of sanity. 2nd ed., 1950.

Dodson and Gilbert—Synopsis of genito-urinary diseases. 5th ed., 1952.

Dunton—Prescribing occupational therapy. 2nd ed., 1945.

Faddis & Hyman—Care of the medical patient. 1952.

Hudson—Occupational therapy in treatment of the tubercular. 1944.

Kessler—Principles and practice of rehabilitation. 1950.

Menninger—A guide to psychiatric books. 1950.

Menninger—A manual for psychiatric case study. 1952.

Moyer—Fluid balance. 1952.

Padgett and Stevenson—Plastic and reconstructive surgery. 1948.

Progress in neurology and psychiatry. Vol. 7, 1952.

Scobee—The oculorotary muscles. 2nd ed., 1952.

Vandervelt and Odenwald—Psychiatry and Catholicism. 1952.

Walker—Physical diagnosis. 1952.

Warren and Le Compte—Pathology of diabetes mellitus. 3rd ed., 1952.

MENTAL HEALTH

Joseph E. Barrett, M.D.
Commissioner, Department of Mental Hygiene and Hospitals

Effects of General Population Trends on Mental Hospital Populations*

As plans go forward for treatment and care of the mentally ill, factors that affect the extent of mental illness must be taken into consideration. One of the main factors is the increase in general population and the fluctuation in the various age groups.

The census taken by the U. S. Census Bureau, showing age groups of the general population, reflects the expectancy of the various age groups being admitted to mental hospitals.

The group under 5 years of age, as reported for the Commonwealth of Virginia in the 1940 census[1], was only an increase of 4% over the same age group in 1930[2]. Those 5 to 14 years of age decreased 10% in the same period. These two age groups cover those born from 1925 to 1940. The first admission rate of this age group to the hospitals for 1940 to 1950 showed a decrease of 20%. This decrease may be expected to extend itself for the next ten years (to 1960), which affects particularly the age group in which schizophrenia (dementia praecox) is the primary mental illness. As the increase in general population for 1950[1] over 1940 shows only 4% increase in the 15 to 24 year age group, this adds emphasis to an anticipated reduced rate of schizophrenia for the next ten years.

With the increase of 56% of those under 5 years of age in 1950 over 1940[1] in the general population, as they grow to the age group affected more with schizophrenia by the years 1960 to 1970, an increase in this group could be expected. At the same time a decrease may be expected in the age group primarily of the manic-depressive type of mental illness because of the general decrease of those born from 1925 to 1940. These facts should be considered in planning facilities and treatment programs.

There will also be other factors entering into this situation, such as education, economic factors, etc. From the high increase of those born from 1945 to 1950, an increase of referrals of children to mental hygiene clinics may be expected within the next 15 years. This early treatment stage may have an effect on increases in first admissions to mental hospitals.

The geriatric problem is going to be one of increasing intensity. The increase has already begun to be felt and as physical medical treatment advances, the life expectancy advances. The average expectancy of those born in 1900 was 49.2 years[3]. For those born around 1930, this had increased to approximately 61 years and around 1950 to approximately 68 years. Those aged 65 and over increased for Virginia in 1940 over 1930[2] by 32% and in 1950 over 1940[1] by 38.5%. The first admissions to mental hospitals of this age group increased in 1950 over 1940 by 61% and the resident population increased 45% in this same age group. (Ages of admission and resident in hospital not available for 1930 to show 1930 to 1940 ratio.)

The graph, Figure No. 1, shows the increase or decrease by age groups for the general population and patients admitted to and resident in State mental hospitals. In reading this chart, the change in general population in the years 1930 to 1940 reflects itself in a group 10 years higher for hospitals, i.e., those under 5 years in 1930 would be reflected in the 15-24 age group for hospital admissions and population in 1940 to 1950.

Even though the number of admissions and the hospital population have increased in the past 13 years, the rate to general population has shown a downward trend. (The period of 1939 through June 30, 1952, is being used, these figures being compiled by the Statistical Division of the Department of Mental Hygiene and Hospitals.) In 1940 the rate of patients in residence in the four mental hospitals was 342.4 per 100,000 of general population; in 1952 this rate was 305.1. The high point was in 1942 with a rate of 351.2 and the low point was 1951 with a rate of 298.4. Except for a drop in numerical population in the hospitals in 1943 and 1944, the hospital population has generally increased. The graph, Figure No. 2, shows the rate to general population and actual number in hospital.

The total admission rate has fluctuated more than resident population. The number of admissions for

*Article by Edna M. Lantz, Statistician, Department of Mental Hygiene and Hospitals.

XUM

1952 reached a high of 3,265; the low was in 1944, a total of 2,246. The low point of rate to general population was also 1944; the high was 1939. The

The first admission rate per 100,000 was generally downward, and also the number of admissions. The high point was 92.3 per 100,000 in 1939 with

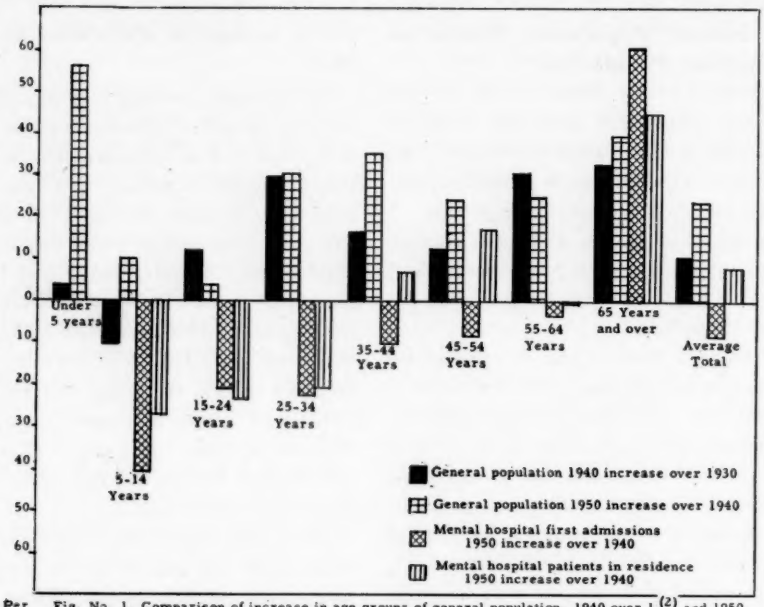


Fig. No. 1. Comparison of increase in age groups of general population, 1940 over 1930 and 1950 over 1940 and the increase of first admissions and hospital resident population of 1950 over 1940.

number of admissions and rate to general population is shown in Figure No. 3.

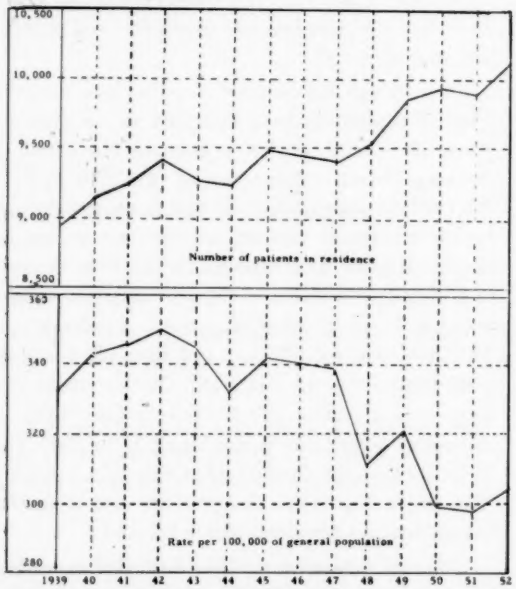


Fig. No. 2. Comparison of number of patients in residence in state hospitals and rate to general population for years 1939 - 1952.

the low point in 1951 of 54.1 per 100,000 of general population. The low point in the number of first admissions was 1944 with 1,597; the high was 1939 with 2,471. The first admissions at the beginning of the period is weighted slightly because a standard definition of a first admission was not in

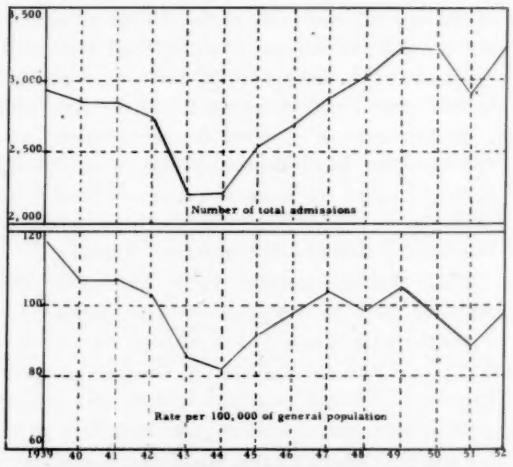


Fig. No. 3 Comparison of number of total admissions to state hospitals and rate per 100,000 of general population for years 1939 - 1952.

use. The readmissions increased during the period —this is weighted by readmissions of the same person more than once during the period, so is not a true picture of a rate to general population, but has to be taken into consideration in planning hospital facilities. The graph, Figure No. 4, depicts the rate per

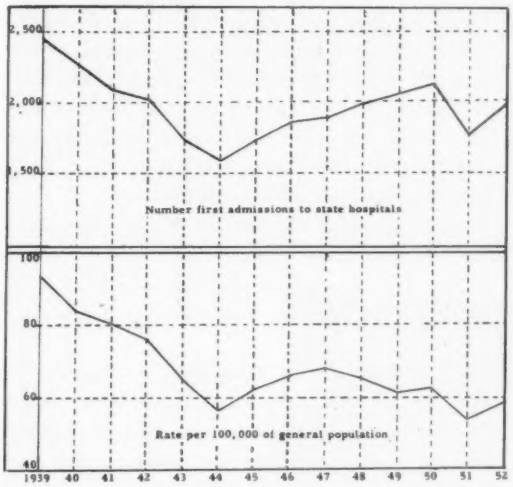


Fig. No. 4 Comparison of number of first admissions to state hospitals and rate per 100,000 of general population for years 1939 - 1952.[4]

100,000 of general population and number of first admissions for this peroid.

The trend for those aged 60 and over as first admissions is rising. The percentage of first admissions of those 60 years of age and over was 19.2% in 1940 and 32.6% in 1951 (1952 age groups have not been tabulated at this time), an increase of 13.4%. Those in hospital increased from 26.0% to 33.2% for the same period, an increase of 7.2%. This is becoming a large problem for administrative officials. The scope of this trend will not be given in this article, as it should be developed from its own standpoint.

The general population in Virginia increased 23.9% in 1950 over 1940[1]. The increase in hospitals for this decade is not high in the lower age groups due to the low percentage of increase in the 15-24 years of age group. However, if the increase in the rate of those under 5 years of age is used as a basis for future planning, we should expect an increase in hospital admissions and population beginning with about 1970. This may be reaching rather far into the future, but barring other unforeseen factors, general population will have to be considered, as it has definitely been a factor in the past. However, it is hoped that the rate of incidence of mental illness, measured by those admitted to mental hospitals per 100,000 of general population, will continue on its downward trend and offset at least some of the natural increase in population.

REFERENCES

1. U.S. Department of Commerce, Bureau of Census, Series PC-12-No. 35—August 22, 1951 release—for 1940 and 1950 age groups.
2. U.S. Census Population, Volume III, Part 2, 1930 Census, Page 1142, for 1930 age groups.
3. Life Insurance Fact Book 1950, Page 76, Published by Institute of Life Insurance, N. Y.
4. 1939— 1942 population rate based on 1940 Census, U. S. Census Bureau.
1943-1946 population rate based on 1943 estimated population by Bureau of Population and Economic Research, University of Virginia.
1947-1949 population rate based on 1947 estimated population by Bureau of Population and Economic Research, University of Virginia.
1950-1952 population rate based on 1950 Census by U.S. Census Bureau.

WOMAN'S AUXILIARY TO THE MEDICAL SOCIETY OF VIRGINIA

President.....MRS. HERMAN W. FARBER, Petersburg
President-Elect..MRS. THOS. N. HUNNICUTT, JR., Newport News
Recording Secretary.....MRS. L. BENJAMIN SHEPPARD, Richmond
Corresponding Secretary.....MRS. CARNEY C. PEARCE, Petersburg
Treasurer.....MRS. K. W. HOWARD, Portsmouth
Parliamentarian.....MRS. HERBERT W. ROGERS, Norfolk
Historian.....MRS. M. H. HARRIS, West Point

Southern Medical Auxiliary Invites Wives to Miami.

The Southern Medical Association meets in Miami, Florida, November 10-13, 1952, and all indications are that it will be a meeting to be long remembered. The hospitable Miamians are going all out in planning a delightful social program for the ladies...

A (tentative) Auxiliary program is as follows:

Sunday, Nov. 9.....Special Executive Committee meetings
Monday, Nov. 10.....Luncheon for Past Presidents
Luncheon for Councilors
Tuesday, Nov. 11.....Executive Board Breakfast
General Sessions
Doctors Day Luncheon
Other social activities, including a Fish Fry on the beach
Wednesday, Nov. 12..General Sessions
Luncheon honoring the President, Mrs. V. Eugene Holcombe, the President-Elect, Mrs. Richard Stover, visiting State Presidents and Charter Members
Thursday, Nov. 13.....Executive Board Banquet

The Auxiliary to the American Medical Association will furnish two of the speakers. Mrs. Ralph B. Eusden, President of the Auxiliary to the A.M.A., will discuss the aims and general program of the Auxiliary, and Mrs. John McCuskey, a vice Chairman, will speak on nurse recruitment.

Wives attending the Southern Medical Association meeting with their husbands are cordially invited to attend all activities of the Auxiliary.

All reservations for luncheons should be made early.

Mrs. W. R. Payne, Hampton, is councilor from the Virginia Auxiliary, and Mrs. H. W. Farber, Petersburg, vice-councilor. Mrs. M. R. Emlaw, Richmond, is vice-chairman of Doctors' Day Committee of the Southern Medical Association.

Northampton-Accomac Auxiliary.

Mrs. John Wise Kellam, president of this Auxiliary, and Dr. Kellam entertained the members of the Auxiliary and of the local medical society at a buffet supper at their cottage at Silver Beach on July the 8th. Mrs. Herman Farber, president of the State Auxiliary, Dr. Farber and their two sons were guests of honor, and a number of doctors and their families also attended.

Doctors Urged to Send in Poisoning Reports.

The Committee on Pesticides of the American Medical Association currently is undertaking a country-wide toxicological study of cases of poisoning resulting from the use of insecticides, rodenticides, fungicides, weed killers, fumigants, repellents and related types of chemicals used in agriculture and the home. This information will be used to expand its permanent file of such cases for use by physicians and allied medical personnel.

Since much of the Committee's information on pesticide poisoning has been compiled from unpublished isolated cases which were brought to its attention, the Committee appeals to physicians to submit records on cases of non-fatal and fatal poisonings from pesticides. The Committee points out that summary data on the pertinent facts of the poisonings and the circumstances of their occurrence would be sufficient in most instances. The Committee is functioning as a center for reporting this type of poisoning cases.

XUM

EDITORIAL

James Loving Hamner

Our New President

AS HAS been true so frequently in the long line of its presidents, the Medical Society of Virginia is indeed fortunate in the selection of "Jim" Hamner to guide it for the coming year. There are few men who have been more diligent in attendance of meetings, committee assignments, and work as a member of the Council for eight years.

Of James Loving Hamner, "Who's Important in Medicine" has the following to say:

"General Practitioner; born October 12, 1893, Ammon, Virginia; son of William D. and Nancy Harriet (White) Hamner; educated at Lynchburg College; Medical College of Virginia; Medical Doctor 1916; married Rebecca J. Sydnor, April 17, 1930;

JAMES LOVING HAMNER, M.D.
President, The Medical Society of Virginia.

one son—James Loving, Jr., Interne, Grace Hospital, 1916-1917. Lieutenant, Medical Reserve Corps, and Lieutenant, Medical Corps, Army of the United States, 1917-1920. Engaged in general private practice of Medicine, Mannboro, Virginia, 1920-. Resident, Willard Parker Hospital, New York City, 1928 (three months). Co-Editor, Department of General Practice, Southern Medical and Surgical; Consultant in General Practice, Current Medical Digest. Director and President of Board, Union Bank

and Trust Company, Amelia, Virginia. Member, State Board of Health, Virginia; Member Executive Committee Virginia Council on Health and Medical Care. Fellow, American Medical Association. Member: Southern Medical Association; Tri-state Medical Society of Virginia and the Carolinas (Ex-Vice-President and Member of Council); Medical Society of Virginia (Ex-Member of Council); Fourth District Medical Society of Virginia (Ex-President); Amelia County Medical Society (Ex-President); American Academy of General Practice; Virginia Academy of General Practice (Ex-President). Clubs: Amelia County Bird, Dog, Ruritan. Hobbies: Farming (raising registered Hereford cattle,) fishing, hunting.

Dr. Hamner is still in active practice in Mannboro, Virginia."

"Jim" Hamner is vitally interested in public health. After helping organize the Amelia County Board of Health, he was its Executive Secretary for twenty-five years, and at present he is serving as a member of the State Board of Health, being on its Executive Committee, as well as its Vice-President. Piedmont Sanatorium utilizes him on its Board of Visitors.

No bibliographical data could indicate the esteem in which our incoming President is held by his patients, neighbors, and fellow physicians. Surely his area needs no Public Relations Committee, for in addition to his bank interest, he has been Chairman of the Amelia County and Ninth Senatorial District Democratic Committee since 1928; Founder, Past President and Director of his county's Beef Growers and Livestock Association; first commander of the local American Legion Post; as well as first President of the Amelia Golf Club, and is active in the Parent Teachers Association. "Jim" is a Mason, and a member of Phi Rho Sigma Fraternity. He is active in Church circles, and is a member of the Church Board of the Disciples of Christ Church. During World War II, he served as a member of the Advisory Board and Medical Examiner for the local Selective Service System.

With respect and humility, let us forget our stock plea of "too busy" and make the coming year one of continued progress under one who leads by serving.

F.J.W., JR.

David Hosack, 1769-1835

THAT this great New York physician of the early nineteenth century, an authority on yellow fever, a botanist of international reputation, professor at various times of botany, of materia medica, surgery and midwifery, of the theory and practice of physic and clinical medicine, and editor, began the practice of medicine in Alexandria, Virginia, will come as a surprise to many of our readers. He was advised by Dr. Benjamin Rush to take this step upon his graduation at the University of Pennsylvania in 1791. Rush argued that Alexandria was likely to become the capitol of the nation. Accordingly he went to Princeton, married Miss Catherine Warner and took his bride to Virginia. In Alexandria he became the friend of Dr. Gustavus Brown of Maryland and Virginia and frequently visited Dr. Brown's beautiful botanical garden at Rose Hill. Here Dr. Brown taught him to know and love plants. This is the first mention of Dr. Hosack's interest in botany.

In 1792 he decided that he needed to go abroad to complete his education so he left his wife and baby under the care of his father in New York and set sail for Liverpool. He did not take his trip too seriously, becoming acquainted with Robert Burns, all the great divines of Scotland and the medical men of Edinburgh. In London he

cultivated not only the teachers of medicine, but also the scientists, especially the botanists. He submitted a manuscript "Observations on Vision" to the Royal Society of London and received the thanks of that body.

In 1794 he returned to New York on the "Mohawk". The passage took fifty-three days and there was an outbreak of typhus fever on board. It fell to his lot, as he was the only physician on board, to treat these patients. All recovered and an unsolicitated vote of thanks was published in the daily papers. Dr. Hosack seems to have been one of those persons who had the knack of always being in the center of things. In 1788 when he was a student in New York he was nearly killed in the famous "Doctor's mob",

David Hosack, M.D.

Courtesy of Annals of Medical History
Paul B. Hoeber, Inc., Publisher

and now he landed while a particularity malignant epidemic of yellow fever was raging in New York. His conduct and his success in treating these cases attracted the attention of Dr. Samuel Bard, a leading physician in New York, with the result that Dr. Bard took him into partnership. In the treatment of the disease, he pursued the sudorific regimen and disclaimed bleeding and mercury which was the accepted treatment. He also held strongly to the contagiousness of the disease. Epidemics followed in 1795, 1796, 1797 and 1798. In the latter he caught the disease. Other epidemics followed in 1803, 1805, 1819, and 1822. Dr. Hosack was regarded as an expert and in 1811 he was appointed on a committee to investigate the epidemic at Amboy, N. J. The report of this committee was written by Dr. Hosack and was published in the medical journals of Edinburgh and London.

Yellow fever occupied only a small part of Dr. Hosack's time. After three or four years Dr. Bard retired and left Dr. Hosack a large and lucrative practice. Besides he had a heavy teaching schedule, first as professor of botany, and materia medica,

XUM

later as professor of surgery, and midwifery and finally as professor of physic. He established the celebrated Elgin Botanical Garden near New York. In 1810, with the help of Dr. John W. Francis, he started the *Medical and Philosophical Register,* and was its editor for a number of years. He was Alexander Hamilton's physician and attended him when he was killed by Aaron Burr in their famous duel.

Dr. Hosack founded the Humane Society and took part in civic movements, especially those for the benefit of the poor. He remodeled the City Dispensary so that it became useful both as a charity and as a school for young medical practitioners. The Dispensary played an important part in the introduction of vaccination. He was instrumental in the establishment of a fever hospital at Bellevue and cooperated with the "Medical Police" in their efforts to improve the sanitary conditions of the city.

He was also interested in education. He gave his extensive collection of minerals to Princeton and a number of valuable books to Columbia. The New York Hospital and Historical Societies profited much by his liberality.

Dr. Hosack's private life was a fitting complement to his public life. His home was a happy one and he kept an open house. He was married three times. He lost his first born child while he was in England, and his first wife died soon after he returned to this country. On December 21, 1797 he married Mary, the daughter of James and Mary Eddy and they had nine children. After the death of his second wife, he married Magdalena, widow of Henry A. Coster, and retired from practice. They established their residence at their beautiful place at Hyde Park where he lived the life of what we would call a gentleman farmer. In the fall of 1835 he returned to the city for the winter, as was his custom, and on December 18th he was paralyzed in his right arm. He died four days later, surrounded by his devoted family.

The Community Chest

THE season for Community Chest drives approaches and it behooves us to consider what it means to each community. Some thirty-five Virginia chests will have their annual campaigns in October. Since our readers are doctors of medicine, a group that knows the workings of the Community Chest Agencies, we need not go into great detail. They know with what care these agencies are chosen and supervised and above all the amount of happiness they create in the community. There is one aspect of the annual compaigns to which we wish to call attention. It is the sole opportunity of every member of the community, regardless of age or color, of sharing with one another the most satisfying of all human emotions, the joy of giving.

Floral Eponym

ASCLEPIADACEAE

AXCLEPIUS

The god of medicine and the son of Apollo is commemorated in botany by the milkweed family.

Asclepiadaceae is a widely distributed family of over 2000 species.

SOCIETIES

The Virginia State Board of Medical Examiners

Announces the following list of applicants who were licensed by the Board at its last regular meeting in June 1952:

By Examination

Dr. William Cardwell Amos, Jr., Richmond.
Dr. Benjamin Norwood Anderson, Jr., Hot Springs.
Dr. Richard Tuberville Arnest, Jr., Hague.
Dr. George Ernest Arrington, Richmond.
Dr. William Marshall Atkins, Petersburg.
Dr. Thomas Alexander Baugh, Petersburg.
Dr. Henry Vaughan Belcher, Norfolk.
Dr. Kenneth William Berger, Brookline, Mass.
Dr. Albert William Biggs, Winston-Salem, N. C.
Dr. Frank Stoddert Blanton, Jr., Farmville.
Dr. Loyd Warren Bond, Roanoke.
Dr. David Moomaw Brillhart, Troutville.
Dr. Milton Henry Brockmeyer, Charlottesville.
Dr. Melvin Hugh Burke, Strasburg.
Dr. Robert Oliver Burns, Lebanon.
Dr. John Fauntleroy Butterworth, III, Richmond.
Dr. Carey Jones Butler, St. Pauls, N. C.
Dr. Leonard Carroll Cantor, Miami, Florida.
Dr. Marshall Jennings Carper, Galveston, Texas.
Dr. Quinton Oswald Carr, Broadway.
Dr. Randolph Catlin, Jr., Charlottesville.
Dr. William Belfield Cave, Charlottesville.
Dr. Irvin Walters Cavedo, Jr., Richmond.
Dr. Gene Edward Clapsaddle, Roanoke.
Dr. Stanley Norman Cohen, Richmond.
Dr. Jesse Reece Cover, Charlottesville.
Dr. James Wendel Creef, Norfolk.
Dr. Kenneth Darte Crippen, Washington, D. C.
Dr. Ben Lake Critzer, Charlottesville.
Dr. Charles Harper Crowder, Jr., South Hill.
Dr. Jesse Wesley Cumbia, Charlottesville.
Dr. John Speight Darden, Richmond.
Dr. Nicholas Edward Davies, Clifton Forge.
Dr. David Barnes Drewry, Drewryville.
Dr. Meade C. Edmunds, Jr., Charlottesville.
Dr. Richard Thomas Ellison, Jr., Philadelphia, Pa.
Dr. Kenneth Hall Epple, Essex Falls, N. J.
Dr. Martin Paul Fischer, Brooklyn, N. Y.
Dr. Richard Orville Flynn, Phoenix, Arizona.
Dr. Robert Lester Gibson, Winston-Salem, N. C.
Dr. John William Giesen, Richmond.
Dr. William Carlyle Gill, Richmond.
Dr. Gustave Lennard Gold, Boston, Mass.
Dr. Harold Louis Goldman, Norfolk.
Dr. William Stuart Greenspon, Bluefield, W. Va.
Dr. Jerome Stanley Gross, Norfolk.
Dr. Robert Humphreys Gruver, Arlington.
Dr. William McLaurine Hall, III, Williamsport, Pa.
Dr. Carroll Stanford Hamilton, Lynchburg.
Dr. Andrew Epes Harris, Jr., Richmond.
Dr. Kenneth Stebbins Helenbolt, Medina, N. Y.
Dr. William Edward Holladay, Jr., Gordonsville.
Dr. Raymond Curtis Houghton, Portsmouth.
Dr. William Caswell Hughes, Suffolk.
Dr. Holcombe Harris Hurt, Jr., Lynchburg.
Dr. Robert Mercier Hutt, Alexandria.
Dr. Juan Francisco Jimenez, Richmond.
Dr. James Edward John, Jr., Charlottesville.
Dr. Emily Edwards Jones, Smithfield.
Dr. Robert S. Kaplan, Norfolk.
Dr. Harvey David Karkus, Perth Amboy, N. J.
Dr. James Burnett Kegley, Jr., Waverly.
Dr. James Bunting Kenley, Portsmouth.
Dr. Earle Jerome Kerpelman, Richmond.
Dr. Carson Meade Keys, Pontiac, Michigan.
Dr. Keith Eugene Kinsey, Staunton.
Dr. Paul Raymond Kleykamp, Ashland, Ky.
Dr. Jack Amory Lawson, Hampton.
Dr. Lionel Melvin Lieberman, Front Royal.
Dr. James Watts Lipscomb, Charlottesville.
Dr. Mary Jane Luke, Charlottesville.
Dr. Jason Eugene McClellan, Charlottesville.
Dr. William Benson McCutcheon, Jr., Durham, N. C.
Dr. John Roger McDonough, Irwin.
Dr. James Porter McNeil, Jr., Jacksonville, Florida.
Dr. Arturo Torres Machin, San Lorenzo, Puerto Rico.
Dr. Henry Page Mauck, Jr., Richmond.
Dr. Ellis Franklin Maxey, Rustburg.
Dr. Bernard Herbert Miller, Norfolk.
Dr. Rose Marie Morecock, Richmond.
Dr. Robert Alan Morton, Portsmouth.
Dr. Thomas Addis Emmet Moseley, Jr., Richmond.
Dr. Harry Leroy Munson, Roanoke.
Dr. John Alexander Murray, Springfield.
Dr. Maury Claiborne Newton, Jr., Narrows.
Dr. John Edward Osborne, Miannsburg, Ohio.
Dr. Thomas Pairo Overton, Richmond.
Dr. Bernard Low Patterson, Roanoke.
Dr. Edgar Elliott Peltz, Chicago, Ill.
Dr. William Clarke Pole, Charlottesville.
Dr. Angelo I. Portela, Arecibo, Puerto Rico.
Dr. Ralph Price, Newport News.
Dr. John Stuart Prince, Richmond.
Dr. James Whitmell Ransone, Charlottesville.
Dr. Harvey Pretlow Rawls, Suffolk.
Dr. William Norton Reingold, Charlottesville.
Dr. Beverly Lee Reynolds, Charlottesville.
Dr. Gilbert Fletcher Rieman, Fredericksburg.
Dr. William Morris Riggins, Jr., Hampton.
Dr. Richard Ovid Rogers, Jr., Bluefield, W. Va.
Dr. Herbert Leon Ruben, Richmond.
Dr. Hugh Walter Rule, Kingsport, Tenn.
Dr. Thomas Wirt Sale, Jr., Norfolk.
Dr. Ernest Dabney Shackleford, Jr., Madison, Wisconsin.

XUM

Dr. William Alexander Shelton, Keysville.
Dr. Marion Moore Sherman, Jr., Hampton.
Dr. Carter Ashton Sinclair, Charlottesville.
Dr. Joseph H. Smith, Charlottesville.
Dr. Richard Carl Snow, Hilton Village.
Dr. Charles Hallacy Spencer, Tunica, Miss.
Dr. Peter Weaver Squire, Richmond.
Dr. William Rudolph Tabor, Bluefield, W. Va.
Dr. James Royster Tarry, Norfolk.
Dr. Aubrey Granville Tolley, Washington, D. C.
Dr. Hubert George Tomlinson, Roanoke.
Dr. Thomas Roper Travis, Richmond.
Dr. William White Trigg, Jr., Petersburg.
Dr. Phil Errington Trimmer, Jr., Richmond.
Dr. Robert William Wash, Jr., Richmond.
Dr. Fred Wasserman, Norfolk.
Dr. George Alexander Weimer, Bethany, W. Va.
Dr. Herbert L. Weinberg, Suffolk.
Dr. Armistead Marshall Williams, Baltimore, Md.
Dr. Frank Quinby Wingfield, Jr., Richmond.
Dr. Edward Ashby Woods, Jr., Pedlar Mills.
Dr. Melvin Earl Yeamans, Richmond.
Dr. Phillip Clayton Yerby, III, Richmond.
Dr. James Robert York, Stephens City.

BY RECIPROCITY OR ENDORSEMENT

Dr. Jean Jacobus Austin, Alexandria.
Dr. Simeon Alexander Austin, Newport News.
Dr. Norman Lee Barr, Washington, D. C.
Dr. Robert Payne Beckwith, Jr., Richmond.
Dr. Truett V. Bennett, Charlottesville.
Dr. Lee Buckingham Brown, Charlottesville.
Dr. Mary Liguori Cantlin, Richmond.
Dr. Edward James Carry, Washington, D. C.
Dr. Norman Kelley Chesley, Imboden.
Dr. William Swindell Credle, Burlington, N. C.
Dr. William Dona Damron, Richlands.
Dr. Alfred F. DeMilia, Whitesville, W. Va.
Dr. Herbert Harold Diamond, Washington, D. C.
Dr. James Walsh Egan, Washington, D. C.
Dr. John Foster, Norfolk.
Dr. James Wilson Fullerton, Lebanon.
Dr. James Wallace Gibson, Aldie.
Dr. Joseph Burton Glenn, Washington, D. C.
Dr. Southgate J. Green, Stonega.
Dr. Kirby Thompson Hart, Jr., Petersburg.
Dr. Charles Arthur Hefner, Roanoke.
Dr. Esther Blanchard Herrell, Ekalaka, Montana.
Dr. Jesse L. Herrell, Jr., Ekalaka, Montana.
Dr. Marshall Davis Hogan, Jr., Bristol.
Dr. Oscar Benwood Hunter, Jr., Washington, D. C.
Dr. Ernagene Fortescue Ingram, Norton.
Dr. Norman H. Isaacson, Washington, D. C.
Dr. Thomas Ralph Jarvis, Jr., Galax.
Dr. Edwin Pratt Jordan, Charlottesville.
Dr. Leo Nicholas Kirch, Norton.
Dr. Willem Frederik Kremer, Morrisdale, Pa.
Dr. Alfred Henry Lawton, Herndon.
Dr. John Albert Martin, Roanoke.
Dr. Joe Henry McCormick, Jr., Petersburg.
Dr. James DeWitt Mills, Jr., Alexandria.
Dr. Alfred B. Miller, Philadelphia, Pa.
Dr. Alvin Benzoin Herbert Mirmelstein, Newport News.
Dr. Eulaine Naiden, Alexandria.
Dr. Ira Weiss Pearlman, Washington, D. C.
Dr. Alec Ambrose Preece, Washington, D. C.
Dr. W. Glenn Reed, Richmond.
Dr. Robert Albert Rounds, Falls Church.
Dr. Douglas Pendleton Rucker, Durham, N. C.
Dr. Lauren Howe Smith, Bryn Mawr, Pa.
Dr. Archie Reid Sutherland, Clintwood.
Dr. George William Thoma, Jr., Richmond.
Dr. Ralph Matthew Thompson, Alexandria.

The Midtidewater Medical Society

Held its regular quarterly meeting at Urbanna on July 22, 1952. This was the 25th anniversary meeting of this society, which was organized on June 27, 1927. Dr. John T. T. Hundley, President of the Medical Society of Virginia, brought greetings from the State society. A brief history of the society was presented by the secretary, Dr. M. H. Harris.

The program consisted of a Panel Discussion of Ulcer of the Stomach. Dr. J. M. Hutcheson, presided and Drs. Frank S. Johns, R. D. Bates, and T. D. Davis assisted in presenting the subject, with reference to cause, management, medical and surgical treatment, and the course.

The next meeting of the society will be held on the 4th Tuesday in October.

The Lynchburg Academy of Medicine

Held its first Fall meeting at a dinner on September 8th. The guest speaker was Dr. W. W. Scott, Professor of Urology at the Brady Clinic, Johns Hopkins Hospital. His subject was the "Diagnosis and Treatment of Operable and Inoperable Carcinoma of the Prostate".

The Roanoke Academy of Medicine

Held its regular meeting September 15 at which time the new officers elected in May were installed. Dr. J. E. Gardner succeeded to the presidency, and the following were to serve with him: President-elect, Dr. C. D. Nofsinger; vice-president, Dr. Charles B. Smith; and secretary-treasurer, Dr. M. A. Johnson, III. Two new members of the Executive Committee will be Dr. Mortimer H. Williams and Dr. Philip C. Trout. New members of the Judiciary and Ethics Committee are Dr. R. S. Owens and Dr. Allen Barker.

NEWS

A Conference of Cardiovascular Disease

Is to be held at the University of Virginia October 24, starting at 9:00 a.m. in McKim Hall (Nursing School Auditorium). Following the welcome by Dr. Lippard, dean of the Department of Medicine, there will be talks by Dr. Julian R. Beckwith of Clifton Forge, and by Drs. Norman F. Wyatt, J. Edwin Wood, Jr., Preston B. Lowrance, Alto E. Feller and George R. Minor of the University. Lunch will be at 12:30 following which the speakers will be Dr. Edward S. Orgain of Duke University, Dr. Wood and Dr. William Parson of the University. Dr. Howard R. Sprague of Boston will give a lecture at 8:00 p.m. in the Medical School Auditorium, his subject being "Fear of Heart Disease".

Physicians planning to attend the Conference should register promptly with the Office of the Dean, Department of Medicine, Charlottesville, Virginia.

The Southern Medical Association

Is to hold its annual meeting in Miami, Florida, November 10-13, under the presidency of Dr. Robert J. Wilkinson of Huntington, West Virginia. All activities will be in the Municipal Auditorium in Bayfront Park and in nearby hotels, everything in walking distance. Regardless of the wishes of attending physicians, there will be a program of interest to all. Good hotel accommodations are available.

The American College of Physicians.

The 34th Annual Session of the College will be held at Atlantic City, N. J., April 13-17, 1953, under the Presidency of Dr. T. Grier Miller of Philadelphia, and the Chairmanship of Dr. Hilton S. Read of Atlantic City. In view of the Session being held in a non-medical center where numerous hospital clinics may be arranged, the Program Committee is extending the program of televised clinics in color, panel discussions, clinical-pathological conferences and symposia.

The American College of Physicians is offering eight (8) postgraduate courses of 1 week's duration each, beginning the end of September. These courses are organized for advanced work and are especially devised for specialists. There are courses in internal medicine, cardiology, hematology and gastroenterology, and they are given at various medical centers, such as New York City, Pittsburgh, Atlanta, Boston, Chicago, Philadelphia, San Francisco and Baltimore. Detailed Bulletins are available through the Executive Secretary, American College of Physicians, 4200 Pine Street, Philadelphia 4, Pa.

The second Tele-Clinic film featuring highlights of the Annual Session of the American College of Physicians held at Cleveland, Ohio, April 21-25, 1952, has now been concluded, and is available for showing before medical societies, hospital staffs and other interested groups. To reserve the film, communicate with Mr. Frank C. Garvin, Wyeth, Inc., 1401 Walnut Street, Philadelphia 2, Pa.

An Appreciation.

The *Journal of the History of Medicine and Allied Sciences,* in its Summer issue, commended our Editor, Dr. M. Pierce Rucker, on his excellent editorial, "A Medical Map of Historic Virginia". This appeared in the February 1952 *Monthly,* and represented a great deal of research and study. It is gratifying to know that his efforts have been appreciated.

New Clinical Journal.

A new monthly Journal entitled Obstetrics and Gynecology, sponsored by the American Academy of Obstetrics and Gynecology, will appear in January, 1953. It will publish original articles, reviews, clinical notes, editorials, and book reviews covering the entire range of clinical obstetrics and gynecology.

The Academy has appointed Dr. Ralph A. Reis of Chicago the Editor of the new Journal and the following Board of Associate Editors: F. Bayard Carter, M.D., R. Gordon Douglas, M.D., Ludwig A. Emge, M.D., Arthur T. Hertig, M.D., S. Leon Israel, M.D., William F. Mengert, M.D., Norman F. Miller, M.D., and Herbert E. Schmitz, M.D.

Obstetrics and Gynecology will be produced in a 7½" x 10½" format of modern design and will be liberally illustrated. It will contain over 1400 pages of editorial material per year. Papers to be considered for publication should be addressed to the Editor, Dr. Ralph A. Reis, 104 South Michigan Avenue, Chicago 3, Illinois.

XUM

The charter subscription price will be twelve dollars per year in the U. S. A. and countries of the Pan-American Union ($13.00 in Canada; $14.00 elsewhere). Subscriptions and all business inquiries should be addressed to the publishers, Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, 49 East 33rd Street, New York 16, New York.

The American Surgeon,

Well-known surgical journal which has been published in Atlanta, Georgia, will be published by The Williams & Wilkins Company of Baltimore, Maryland effective with the January 1953 issue. This was the announcement made by the two organizations sponsoring The American Surgeon: the Southeastern Surgical Congress and the Southwestern Surgical Congress. The journal appears monthly, the editor is Dr. Thomas G. Orr of Kansas City, and the subscription price is $10.00.

Egyptian Doctors on Tour.

A three-day visit to Indianapolis was completed August 19 by nineteen Egyptian physicians. Guests of Eli Lilly and Company, they inspected the Lilly plant and laboratories as well as the state and city medical facilities. All nineteen doctors are faculty members of Cairo medical schools. The trip was organized by Dr. Mohammed El Ayadi and was financed by the doctors themselves. Objectives of their thirty-day American tour, according to Dr. Ayadi, are to exchange professional and scientific ideas and to strengthen the bonds of Egyptian-United States friendship. Also, the group wants to pave the way between the two countries for exchange of medical students for advanced training. Egyptian students in the past usually have taken advanced work in England.

Spokesmen for the group pointed out that medical training in Egypt is being expanded rapidly in an effort to bring adequate medical care to all classes of Egyptians. Whereas five years ago only fifty doctors were graduated each year, four hundred are now graduated. Plans call for eight hundred graduates per year in five years. The group estimated that Egypt needs at least ten thousand more doctors.

The doctors had already inspected medical facilities in Washington, D.C., New York, and Pennsylvania. Their next stop after Indianapolis was the Mayo Clinic, in Rochester, Minnesota, from which they went to drug manufacturing plants and hospitals in Michigan and upper New York State.

Clinical Session, A.M.A.

The sixth annual Clinical Session of the American ican Medical Association—meeting December 2-5 in Denver—will feature practical demonstrations on various phases of medicine of special educational value to the general practitioner. More than 60 scientific exhibits will provide the GP with a postgraduate course in such subjects as office anesthesia, cardiology, dermatology, endocrinology, gynecology, laboratory procedures, otolaryngology, pediatrics and proctology. Emphasis will be on diagnosis and treatment.

In addition to scientific papers presented by leading physicians from all over the United States, highlights of the meeting will include a large technical exhibit, surgical and clinical demonstrations on color television and motion pictures. All technical and scientific exhibits and scientific sessions will be held at Denver's recently-enlarged Municipal Auditorium.

Dr. Ennion S. Williams,

Richmond, has been named by the Virginia Tuberculosis Association as chairman of a committee to supervise a study of tuberculosis conditions in Virginia. Dr. Williams is medical director of the Life Insurance Company of Virginia.

VA Course in Psychiatry and Neurology.

The Veterans Administration is instituting a four-month intensive training course in psychiatry and neurology to fit the needs of physicians without such previous training who are assigned to duty in 22 predominantly psychiatric hospitals. Physicians who have been engaged in general practice may request this training upon applying for a position at one of these hospitals. Physicians will be employed at salaries commensurate with their training and experience (salary range: $5,500 to $11,800 per annum) and assigned to the course with travel and per diem for the four-month period.

Information and applications may be obtained from your nearest VA Hospital or Regional Office, or by writing to the Chief Medical Director, Veterans Administration Central Office, Washington 25, D. C.

Dr. Herbert W. Park,

Who for the past two years had been director of the medical service at Woodrow Wilson Rehabilitation Center at Fishersville, has accepted an appointment at the Medical College of Virginia as professor of physical medicine and rehabilitation and director of the Baruch Center of Physical Medicine. He succeeds Dr. Frances A. Hellebrandt who resigned last winter to accept a similar position at the University of Illinois.

News From State Health Department.

The State Health Department has announced the appointment of several new health officers to its staff. The newly organized Middlesex, Essex, King and Queen health district has been assigned to Dr. Carl A. Broaddus.

Dr. Leonard O. Fears, Jr. will serve as health officer of the Carroll-Grayson district.

Dr. Paul J. Christenson has been assigned to the Alleghany-Botetourt district.

The Louisa-Fluvanna-Goochland district is under the direction of Dr. Robert R. Hogg.

Dr. F. J. Spencer has resigned his position of health officer of Giles-Montgomery-Radford health district, effective September 19. A replacement for Dr. Spencer will be announced in the near future.

Training for Air Force Medical Service.

A wide range of Air Force medical service training courses, heretofore open only to officers and airmen on active service, will be made available to reservists not in active service in the 15 northeastern states in the First Air Force region.

To qualify for these courses, reservists must have prerequisite experience in their specialized medical, dental, or veterinary field, as prescribed in the Air Force training prospectus. Courses will run from 6 to 42 weeks, and will be given at established Air Force and other medical training centers in the South, Southwest and Middle West. Reservists will receive full pay and allowances.

Reservists may forward applications to the Surgeon, First Air Force, Mitchel Air Force Base, N.Y., on forms obtainable from Air Force Volunteer Reserve Training Centers located throughout the First Air Force region.

Dr. M. Pierce Rucker

Has been re-appointed to the Richmond Board of Health for a term of five years, effective September 1. He has been chairman of the Board for sometime.

Dr. Herbert W. Park, III,

Medical Director of the Woodrow Wilson Rehabilitation Center at Fishersville, has received a presidential citation for his work with the physically handicapped. The citation made August 21 and was one of seven awarded nationally.

Dr. Philip J. Morrison,

Who has for several years been connected with the Veterans Administration Hospital at Richmond, has been transferred to a similar hospital at Wilkes-Barre, Pennsylvania.

Urology Award.

The American Urological Association offers an annual award of $1000.00 (first prize of $500.00, second prize $300.00 and third prize $200.00) for essays on the result of some clinical or laboratory research in Urology. Competition shall be limited to urologists who have been in such specific practice for not more than five years and to men in training to become urologists.

For full particulars write the Executive Secretary, William P. Didusch, 1120 North Charles Street, Baltimore, Maryland. Essays must be in his hands before January 15, 1953.

Information Reserve Officers!

Reserve credit points may be earned by medical service Reserve Officers for attendance at the daily sessions of the forthcoming 59th annual meeting of the Association of Military Surgeons the Department of Defense has announced. Eligible medical officers of the Army, Navy, and Air Force Reserves may participate, and the authorization covers physicians, dentists, veterinarians, nurses, Women's Medical Specialist and Medical Service Corps officers.

The various sessions of the meeting, which will be held at the Statler Hotel in Washington, D. C., November 17-19, under the presidency of Major General Harry G. Armstrong, Surgeon General of the Air Force, are recognized as being devoted to subjects having direct military application.

Point credits will be awarded on the basis of one point for each day of attendance, provided meetings attended total more than two hours. Registration for point credits will be handled by representatives of

XUM

Second Army, Navy Bureau of Medicine and Surgery, and First Air Force. Properly authenticated reports will be rendered to all Army Headquarters, Naval Districts and the Reserve Recording Unit, and Numbered Air Forces.

The American Dermatological Association

Is again offering a prize of three hundred dollars for the best essay submitted for original work, not previously published, relative to some fundamental aspect of dermatology or syphilology.

Manuscripts are to be submitted not later than January 1, 1953. The contest is open to scientists generally, not necessarily to physicians. Details regarding this essay contest may be obtained from Dr. Louis A. Brunsting, Secretary, American Dermatological Association, 102-110 Second Avenue, Southwest, Rochester, Minnesota.

The National Gastroenterological Association

Will hold its seventeenth annual convention and scientific sessions at the Hotel Statler in New York City on October 20, 21, 22. Included in the program will be a Symposium on Liver Diseases with Dr. Leandro M. Tocantins of Philadelphia, presenting "Hematological Aspects of Hepatic Disease"; Dr. John R. Neefe of Philadelphia, speaking on "Liver Biopsy"; Dr. S. S. Lichtman of New York, speaking on "The Present Status of Liver Function Tests", and Dr. Hans F. Smetana, Dr. Theodore C. Keller and Major I. N. Dubin of Washington, presenting "Histopathologic Criteria of Diseases of the Liver".

A feature of this session will be the "Symposium for the General Practitioner", at which Dr. Henry W. Cave of New York will speak on "Acute Lower Abdominal Emergencies"; Dr. Herman O. Mosenthal will speak on "Insulin and Diabetes". Dr. Linn J. Boyd of New York will present "Upper Abdominal Pain—Differential Diagnosis" and Dr. Samuel S. Berger of Cleveland will speak on "Bleeding from the Gastrointestinal Tract". Dr. Max P. Cowett of New York will speak on "Rectal Bleeding" and Dr. William Z. Fradkin of Brooklyn will present "Milestones in the Diagnosis and Treatment of Diarrheal Diseases".

There will also be a Symposium on "Bleeding Esophageal Varices and the Problems of Portal Hypertension". Dr. Samuel P. Harbison of Pittsburgh will be the moderator and Dr. Jere Lord, Dr. Mary Ann Payne, Dr. John Madden, all of New York and Dr. Edward M. Kent of Pittsburgh, will be the participants.

Another interesting panel discussion will be on "Gastrointestinal X-ray Methods, Diagnosis and Treatment". Dr. William W. Lermann of Pittsburgh will be the moderator and the participants include Dr. Lay Martin, Baltimore, Dr. Frederick W. Bancroft and Dr. Sidney Weintraub of New York.

Immediately following the Convention, on October 23, 24, 25, the Association will conduct its Fourth Annual Course in Postgraduate Gastroenterology at the Hotel Statler in New York, N. Y. The Course will again be under the personal direction of Drs. O. H. Wangensteen of Minneapolis and I. Snapper, New York.

Further information concerning the program and details of the Postgraduate Course may be obtained by writing to the Secretary, National Gastroenterological Association, 1819 Broadway, New York 23, N. Y.

"Psychological Problems of Cerebral Palsy"

Is a booklet just published by the National Society for Crippled Children and Adults. It includes the proceedings of the first symposium ever held to consider exclusively the psychological aspects of cerebral palsy and brings together the important papers of outstanding psychologists presented at the meeting. This booklet can be purchased at $1.25 a copy from the Society at 11 South La Salle Street, Chicago 3, Illinois.

Important Messages

Appear in the advertisements in the *Monthly* each issue. New products are announced from time to time and much information given about others. Many ads tell of services rendered and commodities offered that may be of service in your practice or in your office. We aim to include only ethical advertising in the *Monthly*. Inquire about these products and ask for samples, stating that you saw their ad in the *Monthly*. These inquiries will help the advertiser as well as your journal.

Spring Congress in Ophthalmology and Otolaryngology.

The twenty-sixth annual Congress sponsored by

the Gill Memorial Eye, Ear and Throat Hospital of Roanoke will be held April 6-11, 1953, in that city.

Among the Guest Speakers will be:

Dr. Rudolph Aebli	New York
Dr. Louis H. Bauer	Hempstead, N. Y.
Dr. Milton L. Berliner	New York
Dr. J. Lamar Callaway	Durham, N. C.
Dr. John M. Converse	New York
Dr. Glen G. Gibson	Philadelphia
Dr. Jack Guyton	Baltimore
Dr. Wallace E. Herrell	Rochester, Minn.
Dr. Charles E. Iliff	Baltimore
Dr. Frank D. Lathrop	Boston
Dr. Francis Lederer	Chicago
Dr. Arthur Linksz	New York
Dr. Alexander S. McMillan	Boston
Dr. Raymond E. Meek	New York
Dr. Guy L. Odom	Durham, N. C.
Dr. A. B. Reese	New York
Dr. H. B. Stallard	London, England
Dr. C. Ronald Stephen	Durham, N. C.
Dr. J. Warrick Thomas	Richmond
Dr. O. E. Van Alyea	Chicago

Unique Series Depicting History of Pharmacy.

An exhibit of 14 original oil paintings, which depict dramatic highlights in the history of pharmacy up to about 1000 A.D., was a feature of the centennial convention of the American Pharmaceutical Association, recently held in Philadelphia. George A. Bender of Parke, Davis & Company, which commissioned the paintings, said they were part of a unique series to be completed by a 37-year-old Detroit artist, Robert A. Thom, in 1955. They are the first of their kind pertaining to pharmacy, he added.

The exhibit at the Bellevue-Stratford Hotel included six in the 1951 series, six in the 1952 series and an advance showing of two in the 1953 series. They are being finished at a rate of six a year and will cover events from "Before The Dawn Of History" up to the present time.

Study of Medical Impairments.

What is probably the largest actuarial study of physical impairments ever undertaken, is now under way in the life insurance companies, embracing 15 years' experience under nearly 400 classes of impairments and the tabulation of many millions of entries.

The study is being made by the Committee on Mortality of the Society of Actuaries, a professional organization made up of more than 1,000 actuaries in the United States and Canada, and is the first major statistical study of medical impairments since before World War II. The current study will cover practically all physical impairments except abnormal blood pressure and abnormal build.

Dr. D. L. Harrell, Jr.,

Superintendent of the Lynchburg State Colony for the past six years, has asked to be relieved of his duties there as of November 15 that he may enter private practice. Since his graduation from the Medical College of Virginia in 1930, he has spent nearly full time in some official capacity with one of the State hospitals.

Wanted:

A physician for contract practice.

A physician for industrial hospital.

If interested, write "Industrial practice", care Virginia Medical Monthly, 1105 W. Franklin Street, Richmond 20, Va. (*Adv.*)

Wanted—A Doctor.

Very badly needed. None within a radius of twenty miles, and can't get those when needed. Thickly settled community. Easily accessible by bus. A paying location. High school, church, post office, tourist camps. House available. Contact Miss Clara Smith, Ladysmith, Virginia. (*Adv.*)

Wanted—Medical Resident.

Beginning July 1, fully equipped 165-bed general hospital has opening for Medical Resident. Stipend $150 a month and maintenance. Address "Medical Director", C. & O. Hospital, Huntington, West Virginia. (*Adv.*)

Private Practice.

In rural Virginia. Present physician is liable for military service. Contact Dr. W. I. Knight, Colonial Beach, Virginia. (*Adv.*)

XUM

OBITUARIES

Dr. John Bowler Fisher,

A general practitioner who has been located at Midlothian for nearly sixty years, died at his home there August 21. He was 84 years of age and a graduate in medicine from the Medical College of Virginia in 1892. He was a leader in medical affairs of the State and one of the founders of the State Board of Health, serving on its board for sixteen years. He served for forty-four years on the Board of Visitors of the Medical College of Virginia, was chairman of the Chesterfield Democratic Committee, served on the board of a banking institution, was the oldest member of and active in the Midlothian Lodge of Masons, had been a member of the Medical Society of Virginia for sixty years, and was also identified with other medical and civic organizations. He is survived by his second wife and five children.

Dr. Claiborne Turner Jones,

Prominent Petersburg physician, died at his home there on September 11, after a long illness. He was sixty-six years of age and a graduate of the Medical College of Virginia in 1906. Shortly thereafter, he located in Petersburg where he practiced for more than forty years. He was a member of the staff of the Petersburg Hospital, a member of his local and medical societies and active in church work. He is survived by his wife and five sons.

Dr. William White Falkener,

Retired physician of Newport News, died September 8 at a local hospital after having been in bad health for sometime. He was sixty years of age and a graduate in medicine from the University of Pennsylvania in 1915. He was engaged in the practice of pediatrics until retirement on account of his health. He had been a member of the Medical Society of Virginia since 1919. His wife and father survive him.

Dr. Gerald A. Ezekiel,

Retired physician of Richmond, died August 25 at a local hospital, having been in ill health for sometime. He was sixty-six years of age and studied medicine at the Medical College of Virginia, from which he graduated in 1908. He joined the Medical Society of Virginia that Fall. He later took postgraduate work at Johns Hopkins University and saw service in World War I. He specialized in diseases of the chest and was for sometime a consultant at Pine Camp Hospital. He is survived by his wife and a son.

Dr. John Cary Sleet,

Retired physician of Norfolk, died September 19, after a long illness. He graduated from the University of Maryland in 1899 and located in Norfolk where he served as assistant health commissioner from 1905 to 1933 and then as commissioner until 1945 when he retired. He was a member of the American Public Health Association of his county and the State Medical societies, being a member of the Fifty Year group in the latter. Surviving him are his wife, a daughter and a sister.

Dr. Horace Faulkner Hoskins,

Saluda, died in a Richmond hospital, August 28. He was seventy-three years of age and a graduate of the Medical College of Virginia in 1908. He had practiced in Middlesex and adjoining counties for forty years prior to his retirement two years ago on account of ill health. He was at one time a member of the Medical Society of Virginia. His wife survives him.

Dr. W. Herman Whitmore,

Richmond, died September 15 in a local hospital. He was sixty-four years of age and a graduate in medicine from the Medical College of Virginia in 1921. He had practiced in this city for more than twenty-five years. His wife and two sons survive him.

Dr. Arthur T. Hart,

Well known physician of Union Level, died at his home there on August 20, after an extended illness. He was seventy-eight years of age and graduated from the Medical College of Virginia in 1896. He located in Mecklenburg County in 1900 and had since practiced there. Several children survive him.

XUM